1. Write two equations for each Math Mountain.

   - 6 + 5 = [ ]
   - 6 + [ ] = 15
   - 5 + 6 = [ ]
   - 18 − 9 = [ ]
   - 9 + [ ] = 18
   - 15 − 6 = [ ]

2. Draw a Math Mountain and write one more equation.

   - 5 + 8 = [ ]
   - 17 − 8 = [ ]
   - 7 + [ ] = 12
   - [ ] = 5 + 8
   - 8 + [ ] = 17
   - 12 − 7 = [ ]
Add.

1. \(4 + 5 = \boxed{9}\)  
   \(0 + 8 = \boxed{8}\)  
   \(3 + 2 = \boxed{5}\)

2. \(1 + 7 = \boxed{8}\)  
   \(7 + 2 = \boxed{9}\)  
   \(2 + 1 = \boxed{3}\)

3. \(6 + 7 = \boxed{13}\)  
   \(2 + 9 = \boxed{11}\)  
   \(7 + 7 = \boxed{14}\)

4. \(8 + 9 = \boxed{17}\)  
   \(4 + 7 = \boxed{11}\)  
   \(1 + 9 = \boxed{10}\)

Subtract.

5. \(8 - 5 = \boxed{3}\)  
   \(5 - 5 = \boxed{0}\)  
   \(4 - 1 = \boxed{3}\)

6. \(6 - 2 = \boxed{4}\)  
   \(9 - 6 = \boxed{3}\)  
   \(5 - 3 = \boxed{2}\)

7. \(14 - 7 = \boxed{7}\)  
   \(5 - 0 = \boxed{5}\)  
   \(18 - 9 = \boxed{9}\)

8. \(16 - 9 = \boxed{7}\)  
   \(14 - 6 = \boxed{8}\)  
   \(15 - 8 = \boxed{7}\)

9. **Stretch Your Thinking** The yard sale records got wet. Write the numbers that should be in the table.

<table>
<thead>
<tr>
<th>Item</th>
<th>Number Sold Each Day</th>
<th>Saturday</th>
<th>Sunday</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birdhouse</td>
<td></td>
<td>1</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Potholder</td>
<td></td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Picture Frame</td>
<td></td>
<td>2</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>
1. Complete the Math Mountains and equations.

\[
\begin{array}{c}
\text{14} \\
8 & 6
\end{array}
\quad \begin{array}{c}
14 \\
8 & 6
\end{array}
\quad \begin{array}{c}
14 \\
8 & 6
\end{array}
\]

\[
8 + 6 = 14 \quad 8 + 6 = 14 \quad 14 - 8 = 6
\]

2. Create and Solve  Write and solve a word problem for one of the equations above.

Answers will vary.

3. Draw a Picture and Explain  Draw two different Math Mountains with a total of 12. Explain why you can make two different Math Mountains.

Answers will vary.

Sample answer:

The Math Mountains have different partners.
Add.
1. \(2 + 6 = \boxed{8}\)  \(5 + 1 = \boxed{6}\)  \(8 + 1 = \boxed{9}\)

2. \(8 + 7 = \boxed{15}\)  \(7 + 5 = \boxed{12}\)  \(8 + 8 = \boxed{16}\)

Subtract.
3. \(9 - 3 = \boxed{6}\)  \(4 - 2 = \boxed{2}\)  \(8 - 1 = \boxed{7}\)

4. \(12 - 8 = \boxed{4}\)  \(16 - 9 = \boxed{7}\)  \(15 - 8 = \boxed{7}\)

5. Write two equations for each Math Mountain.  Equations may vary.

\[
\begin{align*}
7 + 5 &= \boxed{} \\
\boxed{} &= 5 + 7 \\
14 - 9 &= \boxed{} \\
\boxed{} &= 9 + \boxed{} \\
6 + \boxed{} &= 13 \\
\boxed{} &= 13 - 6
\end{align*}
\]

6. Stretch Your Thinking  Write four equations for this Math Mountain.

\[
\begin{align*}
3 + \boxed{} &= 8 \\
\boxed{} + 3 &= 8 \\
8 - \boxed{} &= 3 \\
8 - 3 &= \boxed{}
\end{align*}
\]
Make a ten to find the total.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. $3 + 8 = \boxed{11}$</td>
<td>$4 + 8 = \boxed{12}$</td>
<td>$4 + 9 = \boxed{13}$</td>
</tr>
<tr>
<td>2. $8 + 6 = \boxed{14}$</td>
<td>$9 + 5 = \boxed{14}$</td>
<td>$8 + 5 = \boxed{13}$</td>
</tr>
<tr>
<td>3. $6 + 7 = \boxed{13}$</td>
<td>$7 + 7 = \boxed{14}$</td>
<td>$7 + 5 = \boxed{12}$</td>
</tr>
<tr>
<td>4. $2 + 9 = \boxed{11}$</td>
<td>$5 + 7 = \boxed{12}$</td>
<td>$9 + 2 = \boxed{11}$</td>
</tr>
<tr>
<td>5. $3 + 9 = \boxed{12}$</td>
<td>$8 + 9 = \boxed{17}$</td>
<td>$4 + 7 = \boxed{11}$</td>
</tr>
<tr>
<td>6. $9 + 8 = \boxed{17}$</td>
<td>$7 + 6 = \boxed{13}$</td>
<td>$5 + 9 = \boxed{14}$</td>
</tr>
<tr>
<td>7. $6 + 9 = \boxed{15}$</td>
<td>$6 + 6 = \boxed{12}$</td>
<td>$5 + 6 = \boxed{11}$</td>
</tr>
</tbody>
</table>

8. **Critical Thinking** Explain how to make a ten to find $8 + 6$.

Take 2 from 6 to make a 10.

4 left. $10 + 4 = 14$
Add.
1. \[ \begin{align*}
4 &+ 7 = 11 \\
5 &+ 6 = 11 \\
7 &+ 8 = 15 \\
8 &+ 6 = 14 \\
7 &+ 7 = 14 \\
9 &+ 5 = 14
\end{align*} \]

Subtract.
2. \[ \begin{align*}
13 &- 8 = 5 \\
12 &- 7 = 5 \\
17 &- 9 = 8 \\
14 &- 6 = 8 \\
15 &- 7 = 8 \\
16 &- 8 = 8
\end{align*} \]

3. Write two equations for each Math Mountain. Equations may vary.

\[ \begin{align*}
8 + 5 &= \square \\
\square &= 5 + 8
\end{align*} \]

\[ \begin{align*}
14 - 7 &= \square \\
7 + \square &= 14
\end{align*} \]

\[ \begin{align*}
9 + \square &= 17 \\
17 - 9 &= \square
\end{align*} \]

4. Stretch Your Thinking Write four different Math Mountains with a total of 11. Answers will vary. Sample answers are given.

\[ \begin{align*}
\text{Math Mountain 1:} & \quad 6 + 5 = 11 \\
\text{Math Mountain 2:} & \quad 4 + 7 = 11 \\
\text{Math Mountain 3:} & \quad 2 + 9 = 11 \\
\text{Math Mountain 4:} & \quad 1 + 10 = 11
\end{align*} \]
Find the unknown addend (unknown partner).

1. \(5 + \boxed{7} = 12\)  \(15 - 8 = \boxed{7}\)  \(8 + \boxed{8} = 16\)

2. \(7 + \boxed{9} = 16\)  \(13 - 4 = \boxed{9}\)  \(9 + \boxed{3} = 12\)

3. \(3 + \boxed{9} = 12\)  \(11 - 2 = \boxed{9}\)  \(7 + \boxed{6} = 13\)

4. \(9 + \boxed{6} = 15\)  \(14 - 8 = \boxed{6}\)  \(17 - 9 = \boxed{8}\)

5. \(8 + \boxed{4} = 12\)  \(16 - 8 = \boxed{8}\)  \(16 - 7 = \boxed{9}\)

6. \(5 + \boxed{8} = 13\)  \(18 - 9 = \boxed{9}\)  \(12 - 7 = \boxed{5}\)

7. \(4 + \boxed{8} = 12\)  \(11 - 4 = \boxed{7}\)  \(12 - 9 = \boxed{3}\)

8. Explain Your Thinking  Choose one equation above.
   Explain how you can make a ten to find the partner.
   Answers will vary.
Add.

1. \[\begin{array}{cccccc}
   & 6 & + & 9 & & \\
   + & 7 & + & 8 & + & 9 & + & 6 & + & 5 \\
   \hline
   & 15 & 13 & 16 & 16 & 14 & 13
\end{array}\]

Subtract.

2. \[\begin{array}{cccccc}
   & 11 & - & 3 & & \\
   \hline
   & 8 & 7 & 9 & 9 & 7 & 7
\end{array}\]

3. Complete the Math Mountains and equations.

\[
\begin{array}{c}
\text{16} \\
7 + 9 = 16 \\
\end{array} \quad \begin{array}{c}
\text{16} \\
7 + 9 = 16 \\
\end{array} \quad \begin{array}{c}
\text{16} \\
16 - 7 = 9 \\
\end{array}
\]

Make a ten to find the total.

4. \[\begin{array}{c}
4 + 8 = 12 \\
8 + 9 = 17 \\
8 + 8 = 16
\end{array}\]

5. **Stretch Your Thinking** Which problem is easiest to solve using the make-a-ten strategy? Explain why.

\[\begin{array}{c}
4 + 5 = \\
6 + 5 = \\
9 + 5 = \\
\end{array}\]

Sample answer: 9 + 5 because 9 is the closest number to 10, so you can make a 10 and count 4 more.
Write the unknown addend (partner).

1. \(6 + \square = 15\)  \(17 - 8 = \square\)  \(3 + \square = 11\)
2. \(9 + \square = 17\)  \(12 - 6 = \square\)  \(9 + \square = 12\)
3. \(5 + \square = 11\)  \(12 - 4 = \square\)  \(7 + \square = 12\)
4. \(8 + \square = 13\)  \(15 - 7 = \square\)  \(5 + \square = 14\)
5. \(7 + \square = 11\)  \(15 - 8 = \square\)  \(13 - 7 = \square\)
6. \(9 + \square = 14\)  \(13 - 5 = \square\)  \(11 - 6 = \square\)
7. \(5 + \square = 12\)  \(12 - 3 = \square\)  \(11 - 2 = \square\)
8. \(8 + \square = 13\)  \(15 - 9 = \square\)  \(13 - 6 = \square\)

9. **Critical Thinking**  Explain how the math drawing can help you solve \(8 + \square = 14\).

   Explanations will vary.

---

UNIT 1 LESSON 5  More Practice with Unknown Addends and Teen Totals 9
Add.

1. \[
\begin{array}{cccc}
8 & 6 & 7 & 8 \\
+5 & +5 & +7 & +9 \\
13 & 11 & 14 & 17 \\
\end{array}
\]

Subtract.

2. \[
\begin{array}{cccc}
16 & 15 & 18 & 12 \\
-8 & -9 & -9 & -8 \\
8 & 6 & 9 & 4 \\
\end{array}
\]

3. Complete the Math Mountains and equations.

\[
\begin{align*}
12 & = 8 + 4 \\
12 & = 8 + 4 \\
12 & = 12 - 8 \\
\end{align*}
\]

Find the unknown addend (unknown partner).

4. \[
\begin{align*}
5 & + \underline{6} = 11 \\
13 & - 9 = \underline{4} \\
5 & + \underline{8} = 13 \\
\end{align*}
\]

5. **Stretch Your Thinking** Draw a picture to help you solve

\[7 + \underline{5} = 12.\]

Drawings will vary. Sample drawing shown.

Already 7 \[\bullet\bullet\bullet\] | \[\bullet\bullet\]

\[10 + 2 = 12\]
Draw lines to make pairs. Write odd or even.

1. 
   odd

2. 
   even

3. 
   even

4. 
   odd

Complete the addition doubles equation.

5. \[9 + 9 = 18\]

6. \[3 + 3 = 6\]

7. \[5 + 5 = 10\]

8. \[2 + 2 = 4\]

9. \[4 + 4 = 8\]

10. \[7 + 7 = 14\]

11. \[8 + 8 = 16\]

12. \[6 + 6 = 12\]
Add.
1. \[
\begin{array}{ccc}
7 & + & 8 \\
\hline 
15 & \\
\end{array}
\]
\[
\begin{array}{ccc}
6 & + & 5 \\
\hline 
11 & \\
\end{array}
\]
\[
\begin{array}{ccc}
9 & + & 2 \\
\hline 
11 & \\
\end{array}
\]
\[
\begin{array}{ccc}
7 & + & 5 \\
\hline 
12 & \\
\end{array}
\]
\[
\begin{array}{ccc}
6 & + & 8 \\
\hline 
14 & \\
\end{array}
\]
\[
\begin{array}{ccc}
3 & + & 8 \\
\hline 
11 & \\
\end{array}
\]

Subtract.
2. \[
\begin{array}{ccc}
13 & - & 4 \\
\hline 
9 & \\
\end{array}
\]
\[
\begin{array}{ccc}
15 & - & 8 \\
\hline 
7 & \\
\end{array}
\]
\[
\begin{array}{ccc}
17 & - & 9 \\
\hline 
8 & \\
\end{array}
\]
\[
\begin{array}{ccc}
16 & - & 7 \\
\hline 
9 & \\
\end{array}
\]
\[
\begin{array}{ccc}
18 & - & 9 \\
\hline 
9 & \\
\end{array}
\]
\[
\begin{array}{ccc}
11 & - & 3 \\
\hline 
8 & \\
\end{array}
\]

3. Draw a Math Mountain and write one more equation.

- \[
\begin{array}{c}
9 \\
\hline 
6 \\
\end{array}
\]
\[9 + 6 = \square\]
\[\square = 6 + 4\]
\[6 + 9 = \square\]
\[\square = 6 + 4\]

Make a ten to find the total.
4. \[5 + 8 = 13\] \[8 + 4 = 12\] \[5 + 6 = 11\]

5. Stretch Your Thinking Draw a Math Mountain that only uses two different numbers. Explain why.

Sample answer: I chose a doubles fact, \[6 + 6 = 12\]. Since 6 is used twice there are only two numbers, 6 and 12.
Add. Use doubles.

1. $7 + 5 = \boxed{12}$  
   $7 + 7 = \boxed{14}$  
   $8 + 9 = \boxed{17}$

2. $9 + 9 = \boxed{18}$  
   $9 + 11 = \boxed{20}$  
   $8 + 8 = \boxed{16}$

3. $8 + 7 = \boxed{15}$  
   $6 + 5 = \boxed{11}$  
   $7 + 8 = \boxed{15}$

4. $6 + 4 = \boxed{10}$  
   $7 + 9 = \boxed{16}$  
   $9 + 7 = \boxed{16}$

5. $7 + 6 = \boxed{13}$  
   $5 + 5 = \boxed{10}$  
   $6 + 8 = \boxed{14}$

6. $6 + 6 = \boxed{12}$  
   $6 + 7 = \boxed{13}$  
   $8 + 6 = \boxed{14}$

7. $8 + 10 = \boxed{18}$  
   $5 + 6 = \boxed{11}$  
   $9 + 10 = \boxed{19}$

8. $9 + 8 = \boxed{17}$  
   $10 + 9 = \boxed{19}$  
   $5 + 7 = \boxed{12}$

UNIT 1 LESSON 7
Add.

1. \[ \begin{align*}
4 + 5 & = 9 \\
8 + 3 & = 11 \\
7 + 8 & = 15 \\
9 + 0 & = 9 \\
6 + 9 & = 15 \\
8 + 5 & = 13
\end{align*} \]

Subtract.

2. \[ \begin{align*}
14 - 6 & = 8 \\
11 - 5 & = 6 \\
18 - 9 & = 9 \\
10 - 5 & = 5 \\
7 - 5 & = 2 \\
15 - 6 & = 9
\end{align*} \]

3. Complete the Math Mountains and equations.

\[ \begin{align*}
14 & \quad 14 \\
6 & \quad 8 \\
6 + 8 & = 14 \\
6 + 8 & = 14 \\
14 & \quad 8 \\
14 - 6 & = 8
\end{align*} \]

Write the unknown addend (partner).

4. \[ \begin{align*}
6 + \square & = 12 \\
15 - 7 & = 8 \\
7 + \square & = 16
\end{align*} \]

5. **Stretch Your Thinking** You have a stack of pennies.

Without counting the pennies, how can you know if there is an odd or even number of them?

Sample answer: I can put the pennies in 2 rows and match them.

If there is 1 penny left over, there is an odd number of pennies.

If all the pennies have a match, there is an even number of pennies.
Find the total or partner.

1. \[
\begin{array}{cccc}
5 & + & 6 & + 11 \\
9 & + & 8 & = 17 \\
8 & + & 3 & = 11 \\
9 & + & 4 & = 13 \\
6 & + & 6 & = 12 \\
8 & + & 6 & = 14
\end{array}
\]

2. \[
\begin{array}{cccc}
11 & - & 9 & = 2 \\
14 & - & 6 & = 8 \\
11 & - & 4 & = 7 \\
13 & - & 5 & = 8 \\
12 & - & 3 & = 9 \\
16 & - & 9 & = 7
\end{array}
\]

3. \[
\begin{array}{cccc}
16 & - & 8 & = 8 \\
15 & - & 7 & = 8 \\
12 & - & 5 & = 7 \\
11 & - & 2 & = 9 \\
17 & - & 9 & = 8 \\
14 & - & 7 & = 7
\end{array}
\]

4. Draw a Math Mountain to solve.

\[
16 - 7 = 9
\]

or

\[
16 - 7 = 9
\]

\[
16 - 7 = 9
\]
Add.

1. \[4 + 8 + 9 + 8 + 7 + 2 + 9 + 9 = 13 + 16 + 17 + 9 + 17 + 14\]

Subtract.

2. \[15 - 8 - 11 - 3 - 16 - 7 - 9 - 6 - 14 - 8 - 8 = 7 + 8 + 9 + 3 + 0\]

3. Draw a Math Mountain and write one more equation.

\[\begin{align*}
5 + 6 &= 9 + 7 = 8 + 4 = \\
6 + 5 &= 7 + 9 = \\
&= 8 + 4
\end{align*}\]

Complete the addition doubles equation.

4. \[9 + 9 = 18\]

5. \[6 + 6 = 12\]

6. Stretch Your Thinking Suppose you cannot remember the answer to \(15 - 8 = \). What could you do to solve? Sample answers: I could draw a picture. I could think of the related addition sentence \(8 + \ = 15\).
Add in any order. Write the total.

1. \(9 + 1 + 4 = 14\)
2. \(6 + 9 + 1 = 16\)
3. \(8 + 9 + 1 = 18\)
4. \(7 + 8 + 2 = 17\)
5. \(7 + 5 + 3 = 15\)
6. \(8 + 8 + 2 = 18\)
7. \(1 + 4 + 8 = 13\)
8. \(5 + 6 + 7 = 18\)
9. \(4 + 3 + 8 = 15\)
10. \(2 + 7 + 6 = 15\)
11. \(9 + 9 + 2 = 20\)
12. \(6 + 3 + 7 = 16\)
13. \(4 + 3 + 2 + 4 = 13\)
14. \(6 + 4 + 5 + 5 = 20\)
15. \(8 + 3 + 1 + 7 = 19\)
16. \(1 + 7 + 2 + 4 = 14\)
17. \(3 + 7 + 9 + 3 = 22\)
18. \(7 + 6 + 3 + 4 = 20\)
19. \(8 + 3 + 9 + 3 = 23\)
20. \(1 + 8 + 9 + 4 = 22\)
Add.
1. \[ 7 + 9 = 16 \]
2. \[ 17 - 8 = 9 \]
3. \[ 9 + 6 = 15 \]
4. \[ 5 + 7 = 12 \]
5. \[ 4 + 8 + 9 + 5 + 4 + 6 = 12 + 15 + 14 + 11 + 8 + 15 \]
6. \[ 16 - 9 = 7 \]

Subtract.
2. \[ 12 - 5 = 7 \]
3. \[ 8 + 8 = 16 \]
4. \[ 6 + 8 = 14 \]
5. \[ 11 - 2 = 9 \]
6. \[ 13 - 4 = 9 \]

Make a ten to find the total.
3. \[ 9 + 6 = 15 \]
4. \[ 5 + 7 = 12 \]

Find the total or partner.
5. \[ 4 + 8 + 9 + 5 + 4 + 6 = 12 + 15 + 14 + 11 + 8 + 15 \]
6. \[ 16 - 9 = 7 \]

7. Stretch Your Thinking Explain a way you could add \( 3 + 4 + 7 + 6 \).
   Sample answer: I could make tens. I would add \( 3 + 7 \) and then \( 4 + 6 \) to find a total of 20.
Make a drawing. Write an equation. 
Solve the problem.

1. Brad has 14 toy boats. 5 of them float away. How many does he have now?

\[ 14 - 5 = 9 \]

2. Moses collects 17 rocks. He gives some of them away. Now he has 9 rocks left. How many does he give away?

\[ 17 - 8 = 9 \]

3. Claire has 9 markers in her backpack. Some fall out on the way home. Now she has only 5 markers. How many markers fall out of her backpack?

\[ 9 - 4 = 5 \]

4. A honeybee visits 7 flowers in the garden. Then it visits 5 more. How many flowers does the honeybee visit in all?

\[ 7 + 5 = 12 \]
1. Write two equations for each Math Mountain. Equations may vary.

![Math Mountains]

- $7 + 8 = \square$
- $15 - 6 = \square$
- $6 + \square = 13$
- $\square = 8 + 7$
- $6 + \square = 15$
- $13 - 6 = \square$

Write the unknown addend (partner).

2. $5 + \boxed{6} = 11$
   $13 - 8 = \boxed{5}$
   $15 - 6 = \boxed{9}$

Add in any order. Write the total.

3. $5 + 3 + 5 = \boxed{13}$
   $7 + 8 + 3 = \boxed{18}$
   $2 + 9 + 7 = \boxed{18}$

4. $8 + 2 + 3 + 4 = \boxed{17}$
   $2 + 6 + 6 + 8 = \boxed{22}$

5. Stretch Your Thinking Write a word problem to match this drawing.

Sample answer: Mrs. Sanchez baked 12 muffins for the bake sale.

She sold 7 muffins. How many does she have left? 5 muffins left.
Make a drawing. Write an equation. Solve the problem. Drawings and equations may vary. Show your work.

1. In the morning, Nick makes 8 animals out of clay. In the afternoon, he makes some more clay animals. Altogether, he makes 15 clay animals. How many did he make in the afternoon?
   
   \[8 + \square = 15\]

   - clay animals
   - morning
   - afternoon

   - 8
   - 7

   - 15 altogether

2. Carrie sees some birds in a tree. 8 fly away. 5 are left. How many birds were in the tree in the beginning?

   \[13 - 8 = 5\]

   - birds
   - 8 fly away
   - 00000
   - 13 to start
   - 5 now

3. Leon and his friends made 12 snowmen. The next day, Leon sees that some of them have melted. Only 9 snowmen are left. How many melted?

   \[12 - 3 = 9\]

   - snowmen
   - 12 to start
   - 10 11 12
   - 3 melted
   - 9 now

4. 3 lizards sit on a rock in the sun. Then 9 more come out and sit on the rock. How many lizards are on the rock now?

   \[3 + 9 = 12\]

   - lizards
   - 3 lizards
   - 4 5 6 7 8 9 10 11 12
   - 9 more
   - 12 in all

UNIT 1 LESSON 11
Add To and Take From Problems—Unknown in All Positions
Add. Use doubles.

1. \(8 + 6 = \boxed{14}\) \(7 + 8 = \boxed{15}\) \(5 + 6 = \boxed{11}\)

2. \(7 + 6 = \boxed{13}\) \(11 + 9 = \boxed{20}\) \(8 + 9 = \boxed{17}\)

3. Complete the Math Mountains and equations.

\[
\begin{array}{ccc}
15 & | & 15 & | & 15 \\
7 & + & 8 & + & 8 & - & 7 \\
\end{array}
\]

Make a ten to find the total.

4. \(5 + 9 = \boxed{14}\) \(5 + 8 = \boxed{13}\) \(3 + 9 = \boxed{12}\)

5. \(8 + 6 = \boxed{14}\) \(4 + 7 = \boxed{11}\) \(9 + 7 = \boxed{16}\)

6. **Stretch Your Thinking** Write a word problem to match this drawing.

```
● ● ● ● ● 5 flew away
6 now 7 8 9 10 11 11 to start
```

*Sample answer: Rohan and Tina saw 11 butterflies on a bush. Some butterflies flew away. Now there are 6 butterflies. How many flew away?*
1. There are some pigs on Mr. Smith’s farm. 8 of them are eating corn. The other 7 are drinking water. How many pigs are on Mr. Smith’s farm? 8 + 7 = 15

2. Wendy buys 3 blue balloons and some red balloons for a party. She buys 11 balloons. How many red balloons does she buy? 3 + 8 = 11

3. There are 14 children at the park. 7 of them are on the swings. The rest are jumping rope. How many are jumping rope? 14 - 7 = 7

4. Sean buys 9 red tomatoes and 6 green tomatoes. How many tomatoes does he buy? 9 + 6 = 15
Draw lines to make pairs. Write odd or even.

1. odd
2. even

3. odd
4. even

Add. Use doubles.

5. \(7 + 8 = 15\)  
6. \(8 + 6 = 14\)

9. \(9 + 8 = 17\)  
10. \(5 + 4 = 9\)

\(5 + 3 = 8\)  
\(6 + 7 = 13\)

Find the total or partner.

7. \[\begin{array}{cccc}
4 & 5 & 9 & 7 \\
+8 & +8 & +9 & +6
\end{array} \]
\[\begin{array}{cccc}
12 & 13 & 18 & 13
\end{array} \]

8. \[\begin{array}{cccc}
16 & 12 & 15 & 14 \\
-8 & -3 & -7 & -5
\end{array} \]
\[\begin{array}{cccc}
8 & 9 & 8 & 9
\end{array} \]

9. Stretch Your Thinking Write a word problem that uses doubles and solve.

Sample answer: There are 8 boys waiting in line. The same number of girls are waiting in line. How many children are waiting in line? 16 children
Make a drawing. Write an equation. Solve the problem. Drawings and equations may vary.

1. One bus has 6 girls and 7 boys on it. How many children are on the bus?
   - 6 + 7 = 13
   - 13 children

   - 6 + [ ] = 13
   - 6 + 7 = 13
   - 7 oranges

3. Davant has 16 birds. He has 7 parrots. The rest are canaries. How many canaries does Davant have?
   - 16 - 7 = 9
   - 9 canaries

4. Complete the diagram by adding at least two things in the circle. Write the group name.
   - Shoes
   - Group Name: Sneakers, Sandals, Clogs, Boots
   - Answers will vary.
Remembering

Make a ten to find the total.

1. \(9 + 5 = 14\)  
2. \(8 + 6 = 14\)
3. \(7 + 6 = 13\)

Find the unknown addend (unknown partner).

4. \(17 - 8 = 9\)
5. \(9 - 7 = 2\)

Make a drawing. Write an equation. Solve the problem.  

4. Jim has a box of crayons. He pulls out 8 crayons. 7 are left. How many crayons were in the box to start?
   - Drawings and equations may vary.
   - Make a drawing. Write an equation. Solve the problem.  
   - Show your work.
   - Drawings and equations may vary.

5. Tanya has 9 tulips in a vase. She adds 5 more tulips to the vase. How many tulips are in the vase now?

6. Stretch Your Thinking Write an addition and a subtraction equation you could use to solve this problem: Jill has 6 pens. Ian has some pens. Together they have 14 pens. How many pens does Ian have?

- \(6 + 8 = 14\)
- \(14 - 6 = 8\)
Make a matching drawing or draw comparison bars. Solve the problem. Drawings and equations may vary.

1. Peter has 13 eggs. Joe has 4 fewer eggs than Peter. How many eggs does Joe have?

   - Peter has 13 eggs.
   - Joe has 4 fewer eggs than Peter.
   - Joe has 9 eggs.

   \[13 - 4 = 9\]

2. I want to give each of my 14 friends an apple. I have 8 apples in my basket. How many more apples do I need to pick to give each friend an apple?

   - I have 8 apples in my basket.
   - I want to give each of my 14 friends an apple.
   - I need 6 more apples.

   \[8 + 6 = 14\]

3. Lê has 5 lemons. Tina has 7 more lemons than Lê. How many lemons does Tina have?

   - Lê has 5 lemons.
   - Tina has 7 more lemons than Lê.
   - Tina has 12 lemons.

   \[5 + 7 = 12\]

Write Your Own Complete this word problem. Draw comparison bars and solve. Sample answer is given.

4. I have 12 pencils.

   - My friend has 7 fewer pencils than I have.
   - My friend has 5 pencils.

   \[12 - 7 = 5\]
1. Complete the Math Mountains and equations.

\[
\begin{align*}
7 + 4 &= 11 \\
7 + 4 &= 11 \\
11 - 7 &= 4 \\
\end{align*}
\]

Find the unknown addend (unknown partner).

2. \[7 + \_ = 15\]  \[13 - \_ = 5\]  \[9 + \_ = 15\]

3. \[3 + \_ = 9\]  \[13 - \_ = 6\]  \[8 + \_ = 11\]

Make a drawing. Write an equation.

Solve the problem. Drawings and equations may vary.

4. A table has 16 glasses on it. 7 of the glasses are large. The rest are small. How many glasses are small?

\[9\] glasses

label

5. Stretch Your Thinking Write a word problem to match this comparison bar drawing and solve.

Sample: Mrs. Neal needs \(13\) books for her class.

She has \(5\) books. How many more books does she need?

8 more books
1. Parker and Natu go to the store to buy sunglasses. Parker pays $9 for his sunglasses. Natu pays $6 more than Parker. How much does Natu pay for his sunglasses?

\[
\text{N} = 9 + 6 = 15 \text{ dollars}
\]

2. A small ball costs 8 cents. A ring costs 8 more cents than the small ball. How many cents does a ring cost?

\[
\text{ring} = 8 + 8 = 16 \text{ cents}
\]

3. If Jared gives away 4 strawberries, he will have as many strawberries as Phil. Jared has 11 strawberries. How many strawberries does Phil have?

\[
\text{J} = 11 - 4 = 7 \text{ strawberries}
\]

4. Andrew has 11 soccer balls. William has 3 soccer balls. How many fewer soccer balls does William have than Andrew?

\[
\text{fewer soccer balls} = 11 - 3 = 8
\]
Add.

1. \[ \begin{array}{cc}
      5 & 9 \\
    + 6 & + 3 \\
    \hline
    11 & 12
    \end{array} \]

2. \[ \begin{array}{cc}
      8 & 2 \\
    + 3 & + 9 \\
    \hline
    11 & 11
    \end{array} \]

3. \[ \begin{array}{cc}
      6 & 8 \\
    + 6 & + 6 \\
    \hline
    12 & 14
    \end{array} \]

Make a drawing. Write an equation.
Solve the problem. Drawings and equations may vary.

2. Jamie has some grapes on her plate. Tom has 9 grapes. Together, Jamie and Tom have 14 grapes. How many grapes does Jamie have?

5 grapes

3. Complete the diagram by adding at least two things in the circle. Write the group name.

Answers will vary.

3 things

4. Stretch Your Thinking Write a word problem that would have the top comparison bar with a question mark in it. Then solve using a comparison bar drawing.
Sample problem: Andy has 5 pennies. Ron has 8 more pennies than Andy has. How many pennies does Ron have? 13 pennies

Drawings will vary.
Make a drawing. Write an equation. Solve the problem.

1. Susan rides her bicycle for 14 blocks. Awan rides his bicycle for 8 blocks. How many fewer blocks does Awan ride than Susan?

   6 fewer blocks
   label

   \[14 - 8 = 6\]

2. Eden has 7 blackberries. Her father gives her 9 more. How many blackberries does Eden have now?

   16 blackberries
   label

   \[7 + 9 = 16\]

3. There were 9 children on the bus. At the first bus stop, some children get off. 7 children are still on the bus. How many children got off at the first bus stop?

   2 children
   label

   \[9 - 2 = 7\]

4. The clown has 12 red balloons. He has 4 blue balloons. How many more red balloons than blue balloons does he have?

   8 more red balloons
   label

   \[12 - 4 = 8\]
1. Draw a Math Mountain and write one more equation.

\[
\begin{align*}
8 + 9 &= \square \\
9 + 8 &= \square \\
6 + 7 &= \square \\
\square &= 7 + 6 \\
5 + 8 &= \square \\
8 + 5 &= \square \\
\end{align*}
\]

Complete the addition doubles equation.

2. \[6 + 6 = 12\] \[9 + 9 = 18\]

Find the total or partner.

3. \[
\begin{array}{cccc}
3 & + 7 & 8 & + 9 \\
6 & + 8 & 7 & + 7 \\
1 & + 9 & 1 & + 9 \\
10 & 14 & 17 & 14 \\
\end{array}
\]

4. \[
\begin{array}{cccc}
16 & - 9 & 13 & - 8 \\
14 & - 5 & 6 & - 4 \\
13 & - 7 & 8 & - 5 \\
\end{array}
\]

5. **Stretch Your Thinking** Write a word problem that you could use a Math Mountain drawing to solve. Then solve it.

Sample problem: John has 8 cards. Shelia gives him 5 more. How many cards does he have now?

13 cards
Cross out the extra information or write hidden or missing information. Then solve the problem.

1. Joel has 9 dinosaur cards and 8 bird cards. His friend Peja has 6 dinosaur cards. How many dinosaur cards do the two friends have altogether?

15  dinosaur cards

2. I have a ring for each finger of both hands. I want to buy 4 more rings. How many rings will I have then?

14  rings

3. Erica had 6 coins in her coin collection. She goes to a coin show and buys some more coins. How many coins does she have now?

11  coins

Answers will vary.
Add in any order. Write the total.

1. $7 + 3 + 5 = \boxed{15}$  
   $8 + 4 + 8 = \boxed{20}$

2. $4 + 2 + 8 = \boxed{14}$  
   $1 + 6 + 9 = \boxed{16}$

3. $6 + 2 + 4 + 4 = \boxed{16}$  
   $2 + 6 + 4 + 8 = \boxed{20}$

Make a drawing. Write an equation.

Solve the problem. Equations and drawings will vary.

4. Ryan has 8 stickers. His friend gives him 7 more. How many stickers does Ryan have now?

   [Diagram]
   
   $8 + 7 = \boxed{15}$
   
   8 7
   S more

5. The top shelf has a display of 12 pictures. The bottom shelf has 7 pictures. How many fewer pictures are on the bottom shelf than are on the top shelf?

   [Diagram]
   
   $12 - 7 = \boxed{5}$
   
   12
   7 ?

6. Stretch Your Thinking Why can a problem with extra information be difficult to solve?

   Possible response: If you don’t realize that some of the information is extra, you might use it to solve the problem. Then you will get the wrong answer.
Draw comparison bars. Write an equation. Solve the problem.

1. Morgan sees 15 birds on a bird-watching trip. She sees 6 more birds than Shari. How many birds does Shari see?

   \[ 9 \text{ birds} \]

2. There are 5 fewer trucks than cars in the parking lot. If there are 8 trucks, how many cars are there?

   \[ 13 \text{ cars} \]

3. Anh makes 12 quilts. Krista makes 7 fewer quilts than Anh. How many quilts does Krista make?

   \[ 5 \text{ quilts} \]

4. There are 8 fewer tigers than lions at the zoo. There are 8 tigers at the zoo. How many lions does the zoo have?

   \[ 16 \text{ lions} \]
Reminding

Find the unknown addend (unknown partner).

1. \[3 + 9 = 12\]  \[14 - 6 = 8\]  \[15 - 6 = 9\]
2. \[4 + 9 = 13\]  \[15 - 8 = 7\]  \[14 - 7 = 7\]

Solve the word problems. Drawings will vary. Show your work.

3. There are 13 dancers in the front row. 7 dancers are in the back row. How many fewer dancers are in the back row than are in the front row?

\[13 - 7 = 6\]

6 fewer dancers

label

4. There are 8 birds in the red cage. The blue cage has 4 more birds than the red cage. How many birds are in the blue cage?

\[8 + 4 = 12\]

12 birds

label

5. Stretch Your Thinking When would you use a drawing of comparison bars for a word problem?

Possible response: I would use it if the question asks how two pieces of information compare to each other. For example: how many fewer of one thing than another
Think about the first-step question. Then solve the problem.

1. Bessie counts 5 fish, 3 turtles, and some frogs. She counts 14 animals altogether. How many frogs does Bessie count?

   ![](image1)

   6 frogs

   label

2. Amy has 6 more blue feathers than white feathers. She has 2 more green feathers than blue feathers. Amy has 4 white feathers. How many green feathers does Amy have?

   ![](image2)

   12 green feathers

   label

3. Mr. Green puts 5 tulips and some roses in a vase. There are 14 flowers in the vase. Then Mrs. Green adds 2 more roses to the vase. How many roses are in the vase now?

   ![](image3)

   11 roses

   label
Subtract.

1. \[ 17 - 9 = 8 \]
   \[ 14 - 6 = 8 \]
   \[ 16 - 7 = 9 \]
   \[ 15 - 8 = 7 \]
   \[ 11 - 6 = 5 \]
   \[ 14 - 8 = 6 \]

Add. Use doubles.

2. \[ 4 + 3 = 7 \]
   \[ 7 + 8 = 15 \]
   \[ 6 + 4 = 10 \]

3. \[ 7 + 6 = 13 \]
   \[ 5 + 7 = 12 \]
   \[ 8 + 9 = 17 \]

Make a drawing. Write an equation. Solve the problem.

4. Tom has 12 coins. 9 of them are quarters. The rest are pennies. How many pennies does Tom have?
   
   \[ 3 \] pennies
   
   \[ 12 \] in all
   
   \[ 9 \] Q
   
   \[ 12 - 9 = 3 \]

5. Erica has 15 stickers. Sharon has 9 stickers. How many fewer stickers does Sharon have than Erica?
   
   \[ 6 \] fewer stickers
   
   \[ 15 - 9 = 6 \]

6. Stretch Your Thinking  Are all two-step word problems solved the same way? Explain.
   
   Possible response: No, they can use different operations. Even the same word problem can sometimes be solved in different ways.
Make a drawing. Write an equation. Solve the problem.

1. Malia has 8 hamsters. That is 6 fewer than Sasha has. How many hamsters does Sasha have?

\[ 8 + 6 = 14 \]

<table>
<thead>
<tr>
<th>Hamsters</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
</tr>
</tbody>
</table>

2. Han brings some sandwiches to a picnic. He gives 6 sandwiches to his friends. Now he has 6 sandwiches left. How many sandwiches did Han bring to the picnic?

\[ 6 + 6 = 12 \]

<table>
<thead>
<tr>
<th>Sandwiches</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

3. 15 children are playing marbles. 9 are boys and the rest are girls. Then 5 more girls join them. How many girls are playing marbles now?

\[ 6 + 5 = 11 \]

<table>
<thead>
<tr>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
</tr>
</tbody>
</table>

4. Mike and 3 friends go to the theater. There are 9 other children at the theater. How many children are at the theater altogether?

\[ 4 + 9 = 13 \]

<table>
<thead>
<tr>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
</tr>
</tbody>
</table>
Make a ten to find the total.

1. \(8 + 7 = 15\)  
\[2 + 9 = 11\]  
\[7 + 5 = 12\]

2. \(7 + 4 = 11\)  
\[3 + 8 = 11\]  
\[8 + 4 = 12\]

Add in any order. Write the total.

3. \(5 + 3 + 7 = 15\)  
\[9 + 8 + 1 = 18\]

4. \(5 + 4 + 5 + 2 = 16\)  
\[8 + 2 + 9 + 4 = 23\]

Find the total or partner.

5. \[
\begin{align*}
5 + 7 &= 12 \\
6 + 9 &= 15 \\
7 + 9 &= 16 \\
6 + 6 &= 12 \\
8 + 4 &= 12 \\
2 + 9 &= 11 \\
\end{align*}
\]

6. \[
\begin{align*}
11 - 4 &= 7 \\
17 - 9 &= 8 \\
14 - 8 &= 6 \\
15 - 8 &= 7 \\
12 - 3 &= 9 \\
16 - 9 &= 7 \\
\end{align*}
\]

7. Stretch Your Thinking  Write a problem that can be solved with addition or subtraction.  
Then solve it.
Possible response: Kate has 16 ribbons. Mark has 7 fewer ribbons than Kate has. How many ribbons does Mark have? 9 ribbons
Mrs. Wise and her three children went to the apple orchard. The table shows the number of apples each picked.

### Apples Picked

<table>
<thead>
<tr>
<th>Name</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Wise</td>
<td>6</td>
</tr>
<tr>
<td>Michelle</td>
<td>4</td>
</tr>
<tr>
<td>George</td>
<td>3</td>
</tr>
<tr>
<td>Jen</td>
<td>4</td>
</tr>
</tbody>
</table>

Use the table to solve each story problem. **Show your work.**

1. What was the total number of apples they picked?

   ![17 apples](17)

2. Two children picked the same number of apples. Who were the children?

   Michelle and Jen

   How many apples did those two children pick in all?

   ![8 apples](8)

3. Use the information in the table to write your own problem. Solve the problem.

   Children’s problems will vary.
1. Write two equations for each Math Mountain.

\[
\begin{align*}
\text{7 + 9 = } & \phantom{15} \phantom{15} \\
\phantom{15} \phantom{15} & = 9 + 7 \\
\hline
\text{13 - 5 = } & \phantom{15} \phantom{15} \\
\phantom{15} \phantom{15} & = 5 + 13 \\
\hline
\text{7 + } & = 15 \\
\phantom{15} & = 15 - 7
\end{align*}
\]

Write the unknown addend (partner).

\[
\begin{align*}
6 + 5 & = 11 \\
18 - 9 & = 9 \\
5 + 8 & = 13
\end{align*}
\]

Solve the word problem.

3. Don has 5 more pencils than crayons. He has 3 more markers than pencils. Don has 7 crayons. How many markers does Don have?

\[
\begin{array}{c}
\phantom{15} \phantom{15} \\
\phantom{15} \phantom{15} \\
\phantom{15} \phantom{15}
\end{array}
\]

4. Stretch Your Thinking  Fifteen children voted for their favorite color. The votes for red and blue together were double the votes for green and yellow together. How did the children vote?

\[
\begin{array}{c|c}
\text{Color} & \text{Votes} \\
\hline
\text{Red} & \phantom{15} \phantom{15} \\
\text{Blue} & \phantom{15} \phantom{15} \\
\text{Green} & \phantom{15} \phantom{15} \\
\text{Yellow} & \phantom{15} \phantom{15}
\end{array}
\]

Possible answer: 4 red, 6 blue, 1 green, 4 yellow
1. Write the numbers going down to see the tens.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1</th>
<th>11</th>
<th>21</th>
<th>31</th>
<th>41</th>
<th>51</th>
<th>61</th>
<th>71</th>
<th>81</th>
<th>91</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>12</td>
<td>22</td>
<td>32</td>
<td>42</td>
<td>52</td>
<td>62</td>
<td>72</td>
<td>82</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>13</td>
<td>23</td>
<td>33</td>
<td>43</td>
<td>53</td>
<td>63</td>
<td>73</td>
<td>83</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>14</td>
<td>24</td>
<td>34</td>
<td>44</td>
<td>54</td>
<td>64</td>
<td>74</td>
<td>84</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>15</td>
<td>25</td>
<td>35</td>
<td>45</td>
<td>55</td>
<td>65</td>
<td>75</td>
<td>85</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>16</td>
<td>26</td>
<td>36</td>
<td>46</td>
<td>56</td>
<td>66</td>
<td>76</td>
<td>86</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>17</td>
<td>27</td>
<td>37</td>
<td>47</td>
<td>57</td>
<td>67</td>
<td>77</td>
<td>87</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>18</td>
<td>28</td>
<td>38</td>
<td>48</td>
<td>58</td>
<td>68</td>
<td>78</td>
<td>88</td>
<td>98</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>19</td>
<td>29</td>
<td>39</td>
<td>49</td>
<td>59</td>
<td>69</td>
<td>79</td>
<td>89</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

2. What number comes after 100? 101

3. What number comes next? 102
1. Complete the Math Mountains and equations.

\[ \begin{align*}
6 + 4 & = 10 \\
6 + 4 & = 10 \\
10 - 6 & = 4
\end{align*} \]

Make a ten to find the total.

2. \[ 5 + 7 = 12 \quad 8 + 5 = 13 \quad 4 + 9 = 13 \]

3. \[ 2 + 9 = 11 \quad 3 + 8 = 11 \quad 6 + 8 = 14 \]

4. \[ 7 + 9 = 16 \quad 5 + 6 = 11 \quad 4 + 8 = 12 \]

5. \[ 9 + 9 = 18 \quad 7 + 6 = 13 \quad 6 + 6 = 12 \]

6. Stretch Your Thinking Add 2 tens to 100. What is the number? Explain your thinking.

120; Children’s explanations may vary.
## Add.

1. \(50 + 40 = 90\) \(80 + 10 = 90\) \(60 + 20 = 80\)
   
   \(5 + 4 = 9\) \(8 + 1 = 9\) \(6 + 2 = 8\)

2. \(10 + 70 = 80\) \(30 + 70 = 100\) \(40 + 30 = 70\)
   
   \(1 + 7 = 8\) \(3 + 7 = 10\) \(4 + 3 = 7\)

3. \(30 + 60 = 90\) \(20 + 80 = 100\) \(50 + 40 = 90\)
   
   \(3 + 6 = 9\) \(2 + 8 = 10\) \(5 + 4 = 9\)

4. \(50 + 30 = 80\) \(70 + 20 = 90\) \(40 + 60 = 100\)
   
   \(5 + 3 = 8\) \(7 + 2 = 9\) \(4 + 6 = 10\)

5. \(90 + 10 = 100\) \(50 + 20 = 70\) \(20 + 30 = 50\)
   
   \(9 + 1 = 10\) \(5 + 2 = 7\) \(2 + 3 = 5\)

6. \(30 + 10 = 40\) \(50 + 30 = 80\) \(40 + 20 = 60\)
   
   \(3 + 1 = 4\) \(5 + 3 = 8\) \(4 + 2 = 6\)
2-2

Remembering

Make a ten to find the total.

1. \(8 + 4 = \boxed{12}\) \(5 + 9 = \boxed{14}\) \(6 + 8 = \boxed{14}\)

2. \(5 + 9 = \boxed{14}\) \(6 + 7 = \boxed{13}\) \(3 + 8 = \boxed{11}\)

3. \(2 + 9 = \boxed{11}\) \(7 + 5 = \boxed{12}\) \(6 + 9 = \boxed{15}\)

4. \(9 + 9 = \boxed{18}\) \(4 + 8 = \boxed{12}\) \(8 + 8 = \boxed{16}\)

Find the unknown addend (unknown partner).

5. \(3 + \boxed{9} = 12\) \(8 + \boxed{5} = 13\) \(15 - 7 = \boxed{8}\)

6. \(6 + \boxed{6} = 12\) \(4 + \boxed{9} = 13\) \(18 - 9 = \boxed{9}\)

7. \(7 + \boxed{7} = 14\) \(9 + \boxed{8} = 17\) \(16 - 9 = \boxed{7}\)

8. Stretch Your Thinking Draw hundred boxes, ten sticks, and circles to show a number between 100 and 200. What number did you show?

Answers and drawings will vary.
Draw the number using hundred boxes, ten sticks, and circles. Then write the expanded form.

1. \[176\] 
   \[100 + 70 + 6\]

2. \[143\] 
   \[100 + 40 + 3\]

3. \[184\] 
   \[100 + 80 + 4\]

What number is shown?

4. \[127\] 
   \[100 + 20 + 7\]

5. \[163\] 
   \[100 + 60 + 3\]

6. \[132\] 
   \[100 + 30 + 2\]

7. \[117\] 
   \[100 + 10 + 7\]
Write the unknown addend (partner).

1. \(5 + \square = 15\)
   \(17 - 9 = \square\)
   \(7 + \square = 11\)

2. \(6 + \square = 14\)
   \(16 - 7 = \square\)
   \(3 + \square = 11\)

3. \(7 + \square = 15\)
   \(12 - 7 = \square\)
   \(6 + \square = 15\)

Complete the addition doubles equation.

4. \(\square + \square = 16\)

5. \(\square + \square = 10\)

6. \(\square + \square = 8\)

7. \(\square + \square = 14\)

8. \(\square + \square = 12\)

9. \(\square + \square = 18\)

10. Stretch Your Thinking  Show 194 two different ways.

    Possible answer: 1 hundred box, 9 ten sticks, 4 circles; \(100 + 90 + 4\)
Solve. Make a proof drawing.

1. Mina picks 63 flowers from her garden. She can put 10 flowers in each vase. How many vases can she fill? How many extra flowers will she have?
   
   6 vases 3 extra flowers

2. Luisa has 85 coupons. She can trade in 10 of them for a toy. How many toys can Luisa get for her coupons? How many coupons will she have left over?
   
   8 toys 5 coupons left over

3. Dr. Turk wants to buy books that cost 10 dollars each. He has 145 dollars. How many books can he buy? How many dollars will he have left over?
   
   14 books 5 dollars left over

4. The track team has 72 water bottles. They pack them 10 to a box. How many boxes do they fill? How many water bottles are left over?
   
   7 boxes 2 water bottles left over
Make a drawing. Write an equation. Solve the problem. Show your work.

1. Amir had 9 books. He went to the library and got 4 more. How many does he have now?
   
   \[
   \begin{align*}
   &\text{13 books} \\
   &\text{label}
   \end{align*}
   \]

2. Bella had 15 balloons. Some of the balloons flew away. Now she has 8 balloons left. How many balloons flew away?
   
   \[
   \begin{align*}
   &\text{7 balloons} \\
   &\text{label}
   \end{align*}
   \]

3. What number is 10 more than 9? Explain or show how you know.
   
   \[19; \text{Children's explanations may vary.}\]

4. Write the numbers from 34 to 44.
   
   \[34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44\]

5. Stretch Your Thinking Make a math drawing to solve the word problem. There are 47 children in Ali's gym class. They need to stand in groups of 10. How many groups of children will there be? How many children will not be in a group of 10?
   
   \[
   \begin{align*}
   &\text{4 groups} \\
   &\text{7 children not in a group of 10}
   \end{align*}
   \]
Make a drawing for each number. Write <, >, or =.

1. $131 < 141$
2. $29 > 28$

3. $56 = 56$
4. $132 > 38$

Write <, >, or =.

5. $157 < 175$
6. $103 < 107$

7. $80 > 18$
8. $100 = 100$

9. $148 < 149$
10. $116 > 99$

11. $122 < 150$
12. $73 < 111$

13. $64 = 64$
14. $188 > 186$
Add.

1. \(40 + 30 = \underline{70}\)  \(60 + 20 = \underline{80}\)  \(90 + 10 = \underline{100}\)
   \(4 + 3 = \underline{7}\)  \(6 + 2 = \underline{8}\)  \(9 + 1 = \underline{10}\)

2. \(50 + 50 = \underline{100}\)  \(70 + 20 = \underline{90}\)  \(80 + 20 = \underline{100}\)
   \(5 + 5 = \underline{10}\)  \(7 + 2 = \underline{9}\)  \(8 + 2 = \underline{10}\)

3. \(20 + 50 = \underline{70}\)  \(30 + 20 = \underline{50}\)  \(40 + 50 = \underline{90}\)
   \(2 + 5 = \underline{7}\)  \(3 + 2 = \underline{5}\)  \(4 + 5 = \underline{9}\)

Draw the number using hundred boxes, ten sticks, and circles. Then write the expanded form.

4. \(153\)  \(100 + 50 + 3\)

5. \(118\)  \(100 + 10 + 8\)

6. **Stretch Your Thinking** Which number is greater, 134 or 143? Explain. Draw a picture if you like.
   143; Possible answer: both numbers have 1 hundred but 143 has more tens.
Add ones, tens, or a hundred.

1. \[ 9 + 8 = \boxed{17} \quad 7 + 7 = \boxed{14} \quad 9 + 5 = \boxed{14} \]
   \[ 90 + 80 = \boxed{170} \quad 70 + 70 = \boxed{140} \quad 90 + 50 = \boxed{140} \]

2. \[ 6 + 8 = \boxed{14} \quad 8 + 3 = \boxed{11} \quad 9 + 7 = \boxed{16} \]
   \[ 60 + 80 = \boxed{140} \quad 80 + 30 = \boxed{110} \quad 90 + 70 = \boxed{160} \]

3. \[ 7 + 5 = \boxed{12} \quad 6 + 9 = \boxed{15} \quad 8 + 8 = \boxed{16} \]
   \[ 70 + 50 = \boxed{120} \quad 60 + 90 = \boxed{150} \quad 80 + 80 = \boxed{160} \]

4. \[ 8 + 7 = \boxed{15} \quad 6 + 5 = \boxed{11} \quad 9 + 4 = \boxed{13} \]
   \[ 80 + 70 = \boxed{150} \quad 60 + 50 = \boxed{110} \quad 90 + 40 = \boxed{130} \]

5. \[ 100 + 48 = \boxed{148} \quad 21 + 100 = \boxed{121} \quad 100 + 2 = \boxed{102} \]
   \[ 10 + 48 = \boxed{58} \quad 21 + 10 = \boxed{31} \quad 10 + 2 = \boxed{12} \]
   \[ 1 + 48 = \boxed{49} \quad 21 + 1 = \boxed{22} \quad 1 + 2 = \boxed{3} \]
1. Start with 10. Count by tens to 100.

10, 20, 30, 40, 50, 60, 70, 80, 90, 100

2. Write the numbers from 56 to 66.

56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66

3. Write the numbers from 81 to 91.

81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91

Draw the number using hundred boxes, ten sticks, and circles. Then write the expanded form.

4. 

127

100 + 20 + 7

5. 

109

100 + 0 + 9

6. 

133

100 + 30 + 3

7. Stretch Your Thinking Add ones or tens.

4 + 4 = 8

3 + 6 = 9

40 + 40 = 80

30 + 60 = 90

140 + 40 = 180

130 + 60 = 190
Solve. Make a proof drawing.

1. Kivy makes 34 baskets. Her father makes 58 baskets. How many baskets do they make in all?

   \[ 92 \text{ baskets} \]

2. Glen printed 67 posters yesterday and 86 more today. How many posters did he print altogether?

   \[ 153 \text{ posters} \]

Add.

3. \[
\begin{align*}
39 &+ 44 \\
67 &+ 56 \\
47 &+ 98
\end{align*}
\]

   \[
\begin{align*}
83 \\
123 \\
145
\end{align*}
\]

4. \[
\begin{align*}
48 &+ 33 \\
85 &+ 68 \\
94 &+ 57
\end{align*}
\]

   \[
\begin{align*}
81 \\
153 \\
151
\end{align*}
\]
1. Elena set the table for 9 people. Three more people came for dinner. How many people were there in all?

\[ \text{12 people} \]

2. Hector had 12 pennies. He lost 4 of them. How many does he have now?

\[ \text{8 pennies} \]

3. Oni ate 3 cookies that she baked. She now has 9 left. How many did she bake?

\[ \text{12 cookies} \]

4. Aisha found 9 shells at the beach. She now has 17 shells. How many did she have before she went to the beach?

\[ \text{8 shells} \]

5. Stretch Your Thinking  
   Tisa collects animal stickers. She had 96 stickers. She found 4 more stickers. Then her cousin gave her 16 more. How many stickers does she have now? Explain how you found your answer.

\[ 116 \text{ stickers; Possible explanation: I counted on 4 from 96 to get 100. Then I added 16 to 100 to get 116.} \]
Add. Use any method.

1. \[ \begin{align*} 97 &+ 45 \\ 142 \end{align*} \]

2. \[ \begin{align*} 56 &+ 77 \\ 133 \end{align*} \]

3. \[ \begin{align*} 47 &+ 73 \\ 120 \end{align*} \]

© Houghton Mifflin Harcourt Publishing Company

Addition—New Groups Below Method
Draw the number using hundred boxes, ten sticks, and circles. Then write the expanded form.

1. \[100 + 80 + 5\]

2. \[100 + 30 + 2\]

Make a drawing for each number. Write <, >, or =.

3. \[143 < 151\]

4. \[87 = 87\]

Add ones or tens.

5. \[9 + 9 = 18\] \[8 + 4 = 12\] \[8 + 6 = 14\] \[90 + 90 = 180\] \[80 + 40 = 120\] \[80 + 60 = 140\]

6. Solve the word problem. Ida had a box of 39 crayons. Juan gave her another 28 crayons. How many crayons does she have now?

7. Stretch Your Thinking Add. Explain your method.

Children’s explanations will vary.
Add. Use any method.

1. \[
\begin{align*}
83 & \quad 65 & \quad 78 \\
+79 & \quad +47 & \quad +34 \\
\hline
162 & \quad 112 & \quad 112
\end{align*}
\]

2. \[
\begin{align*}
74 & \quad 48 & \quad 92 \\
+99 & \quad +87 & \quad +59 \\
\hline
173 & \quad 135 & \quad 151
\end{align*}
\]

3. \[
\begin{align*}
63 & \quad 75 & \quad 86 \\
+77 & \quad +48 & \quad +32 \\
\hline
140 & \quad 123 & \quad 118
\end{align*}
\]
Add.

1. 7 + 9 = 16  5 + 8 = 13  4 + 6 = 10
   70 + 90 = 160  50 + 80 = 130  40 + 60 = 100

2. 100 + 36 = 136  41 + 100 = 141  100 + 67 = 167
   10 + 36 = 46  41 + 10 = 51  10 + 67 = 77
   1 + 36 = 37  41 + 1 = 42  1 + 67 = 68

Solve. Make a proof drawing.

3. Mrs. Martin makes 36 sandwiches for a school fair. Her friend makes 24 sandwiches. How many sandwiches do they make in all?
   
   60 sandwiches

4. Luis has a collection of 58 rocks. He finds 44 more. How many rocks does he have now?
   
   102 rocks

Add. Use any method.

5. 74 + 96 = 170  58 + 69 = 127  45 + 87 = 132

6. Stretch Your Thinking Find the unknown addend.
   
   57 + 68 = 125

Children’s drawings may vary.
Be the helper. Is the answer OK? Write Yes or No. If No, fix the mistakes and write the correct answer.

1. \[ 27 + 45 = 72 \]  **Yes**

2. \[ 68 + 29 = 97 \]  **No**

3. \[ 32 + 29 = 61 \]  **No**

4. \[ 16 + 67 = 83 \]  **No**

5. \[ 59 + 25 = 84 \]  **No**

6. \[ 51 + 44 = 95 \]  **Yes**

7. \[ 85 + 56 = 141 \]  **Yes**

8. \[ 58 + 99 = 157 \]  **No**

9. \[ 73 + 82 = 155 \]  **No**
Solve. Make a proof drawing.  

Show your work.

1. Sara has 58 flower seeds to plant in her garden. Her father has 49 seeds. How many seeds do they have altogether?

\[ 107 \text{ seeds} \]

label

2. Oliver has a collection of 79 coins. A friend gives him 25 more coins. How many coins does he have in all?

\[ 104 \text{ coins} \]

label

Add. Use any method.

3. 
\[
\begin{align*}
88 & \quad + & 75 & \quad + & 64 \\
56 & \quad + & 49 & \quad + & 28 \\
144 & \quad + & 124 & \quad + & 92 \\
\end{align*}
\]

4. 
\[
\begin{align*}
99 & \quad + & 77 & \quad + & 69 \\
88 & \quad + & 44 & \quad + & 83 \\
187 & \quad + & 121 & \quad + & 152 \\
\end{align*}
\]

5. Stretch Your Thinking  Write a 2-digit addition exercise and find the sum.  \textbf{Answers will vary.}

Example: \[
\begin{align*}
47 & \quad + & 56 \\
103 & \\
\end{align*}
\]
Here are some more fruits and vegetables from the Farm Stand. Answer the questions below. Then draw the money amount. The first one is done for you.

<table>
<thead>
<tr>
<th>Fruits/Vegetables</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>79¢</td>
</tr>
<tr>
<td>Eggplant</td>
<td>96¢</td>
</tr>
<tr>
<td>Pears</td>
<td>58¢</td>
</tr>
<tr>
<td>Green Onions</td>
<td>67¢</td>
</tr>
<tr>
<td>Oranges</td>
<td>85¢</td>
</tr>
</tbody>
</table>

How much would you spend if you wanted to buy

1. apples and oranges?
   - $1.64

2. apples and green onions?
   - $1.46

3. pears and green onions?
   - $1.25

4. eggplant and oranges?
   - $1.81
Add. Use any method.

1. \[
\begin{array}{c}
76 \\
+ 38 \\
\hline
114
\end{array}
\quad 
\begin{array}{c}
52 \\
+ 39 \\
\hline
91
\end{array}
\quad 
\begin{array}{c}
67 \\
+ 88 \\
\hline
155
\end{array}
\]

2. \[
\begin{array}{c}
28 \\
+ 96 \\
\hline
124
\end{array}
\quad 
\begin{array}{c}
74 \\
+ 39 \\
\hline
113
\end{array}
\quad 
\begin{array}{c}
51 \\
+ 89 \\
\hline
140
\end{array}
\]

Be the helper. Is the answer OK? Write yes or no. If no, fix the mistakes and write the correct answer.

3. \[
\begin{array}{c}
28 \\
+ 66 \\
\hline
94
\end{array}
\quad \text{OK?} \quad 
\begin{array}{c}
61 \\
+ 38 \\
\hline
99
\end{array}
\quad \text{OK?} \quad 
\begin{array}{c}
57 \\
+ 89 \\
\hline
146
\end{array}
\quad \text{OK?}
\]

4. \[
\begin{array}{c}
33 \\
+ 67 \\
\hline
100
\end{array}
\quad \text{OK?} 
\]

5. \[
\begin{array}{c}
82 \\
+ 79 \\
\hline
161
\end{array}
\quad \text{OK?} 
\]

6. \[
\begin{array}{c}
54 \\
+ 95 \\
\hline
149
\end{array}
\quad \text{OK?}
\]

9. **Stretch Your Thinking** Doris buys some apples for 69¢ and some pears for 78¢. She gives the cashier $1.50. Does she give the cashier enough money? Explain.

Yes; She spends $1.47 and $1.50 is more than $1.47.
Under the coins, write the total amount of money so far. Then write the total using $. The first one is done for you.

1. 5¢  5¢  5¢  5¢

$ 0.20

2. 5¢  5¢  1¢  1¢  1¢

$ 0.13

3. 10¢  10¢  1¢  1¢  1¢  1¢

$ 0.24

4. 10¢  10¢  10¢  5¢  5¢  5¢

$ 0.45

5. Troy has 1 dime, 5 nickels, and 4 pennies.

Draw 10s, 5s, and 1s.

$ 0.39

Write the total amount of money.
Add. Use any method.

1. 68 + 57 = 125
   85 + 29 = 114
   94 + 76 = 170

Be the helper. Is the answer OK? Write yes or no. If no, fix the mistakes and write the correct answer.

2. 52 + 74 = 126
   OK? No

3. 84 + 46 = 130
   OK? No

4. 63 + 69 = 132
   OK? No

Answer the questions below. Then draw the money amount.

5. Dino bought a bunch of carrots for 89¢ and some celery for 78¢. How much did he spend?
   $1.67 (or 167¢)

6. Tina bought a bunch of carrots for 88¢ and some celery for 58¢. How much did she spend?
   $1.46 (or 146¢)

7. Stretch Your Thinking Draw 10 coins to show an amount between 50¢ and $1.00. Use only 10, 5, and 1. Make sure it is the fewest number of coins for that amount.
   Possible answer is given.
   10 10 10 10 10
   10 10 10 10
   5
   1 1 1
Add.

1. \[42 + 54 = 96\]
2. \[19 + 64 = 83\]
3. \[58 + 32 = 90\]
4. \[70 + 23 = 93\]
5. \[29 + 29 = 58\]
6. \[47 + 34 = 81\]
7. \[38 + 62 = 100\]
8. \[51 + 20 = 71\]
9. \[82 + 17 = 99\]

10. Explain how you found the sum for Exercise 7.

Check children’s work. Children’s explanations should include making a new ten and a new hundred.
Solve. Make a proof drawing.

1. Sal goes to a plant nursery and sees 57 apple trees and 79 pear trees. How many trees does he see in all?

\[ 136 \text{ trees} \]

2. Carol has a bag of red and yellow marbles. 48 of them are red and 63 of them are yellow. How many marbles does she have in total?

\[ 111 \text{ marbles} \]

Add. Use any method.

3. 
\[
\begin{align*}
47 + 77 &= 124 \\
91 + 29 &= 120 \\
38 + 67 &= 105
\end{align*}
\]

Be the helper. Is the answer OK? Write yes or no. If no, fix the mistakes and write the correct answer.

4. 
\[
\begin{align*}
57 + 49 &= 106 \\
72 + 39 &= 111 \\
63 + 78 &= 141
\end{align*}
\]

7. Stretch Your Thinking Write an addition word problem using two 2-digit numbers. Solve the problem. Show your work.

Problems will vary.
Add.

1. \(19 + 26 + 31 = 76\)

2. \(25 + 36 + 27 = 88\)

3. \(28 + 35 + 23 + 38 = 124\)

4. \(17 + 44 + 56 + 30 = 147\)
Add. Use any method.

1. \[90 + 80 = 170\]
2. \[35 + 89 = 124\]
3. \[58 + 86 = 144\]
4. \[71 + 68 = 139\]
5. \[87 + 99 = 186\]
6. \[64 + 36 = 100\]

Be the helper. Is the answer OK? Write yes or no. If no, fix the mistakes and write the correct answer.

3. \(\frac{58}{\text{OK?}}\) \[\frac{86}{\text{Yes}}\] \[\frac{144}{\text{OK?}}\]
4. \(\frac{71}{\text{OK?}}\) \[\frac{68}{\text{No}}\] \[\frac{139}{\text{OK?}}\]
5. \(\frac{87}{\text{OK?}}\) \[\frac{99}{\text{No}}\] \[\frac{186}{\text{No}}\]

6. Add. Explain how you found the sum.

\[64 + 36 = 100\]

Check children’s work. Children’s explanations should include making a new ten and a new hundred.

7. **Stretch Your Thinking** Write an addition exercise using three 2-digit numbers. Find the sum.

Check children’s work.
Solve each word problem.

1. Violet returns 4 bottles to the Recycle Center. She gets one nickel for each bottle. How much money does she get?

   \[
   \text{20¢ or$0.20}
   \]

2. Jesse gets 40¢ for cans he brings to the Recycle Center. He gets 5¢ for each can. How many cans does he bring?

   \[
   \boxed{8} \text{ cans}
   \]


   \[
   \boxed{64} \text{ cans}
   \]

4. Write a word problem of your own that is about recycling and has the answer 85 bottles.

   Children’s word problems will vary.

   Possible answer: Alice collected 17 bottles. Luis collected 68 bottles. How many bottles did they collect in all?
Under the coins, write the total amount of money so far. Then write the total using $.

1. 

\[
\begin{array}{cccccc}
5\cent & 10\cent & 15\cent & 20\cent & 21\cent \ \ \ \ $ & 0.21 \\
\end{array}
\]

2. 

\[
\begin{array}{cccccc}
10\cent & 20\cent & 25\cent & 26\cent & 27\cent \ \ \ \ $ & 0.27 \\
\end{array}
\]

Add.

3. \[45 + 19 = 64\]

4. \[76 + 20 = 96\]

5. \[67 + 23 = 90\]

6. \[22 + 17 + 35 = 74\]

7. \[15 + 39 + 31 + 49 = 134\]

8. **Stretch Your Thinking** Darif wants to buy 3 tickets for a ride at the fair. Each ticket costs 39¢. Darif has $1.28.

   How many tickets can he buy? \underline{3 tickets}

   How much money will he spend? \underline{$1.17
Use your centimeter ruler. Measure each horizontal line segment below by marking and counting 1-cm lengths.

1. [line segment 6 cm]

2. [line segment 9 cm]

3. [line segment 7 cm]

4. Draw a line segment 8 cm long. Mark and count 1-cm lengths to check the length.

Measure each vertical line segment below by marking and counting 1-cm lengths.

5. [line segment 3 cm]

6. [line segment 5 cm]

7. [line segment 2 cm]
Make a ten to find the total.

1. \(4 + 7 = 11\) \(4 + 8 = 12\) \(9 + 5 = 14\)

2. \(8 + 5 = 13\) \(7 + 9 = 16\) \(6 + 7 = 13\)

Draw lines to make pairs.
Write odd or even.

3. [diagram]

   even

4. [diagram]

   odd

Add.

5. \(30 + 60 = 90\) \(50 + 20 = 70\) \(10 + 90 = 100\)

   \(3 + 6 = 9\) \(5 + 2 = 7\) \(1 + 9 = 10\)

6. **Stretch Your Thinking** Ryan measures the length of his pen. He places the end of the pen at the 1-inch mark of a ruler. Tell why the measurement will be wrong.

   Ryan should put the end of the pen at the 0 mark of the ruler. If he starts at the 1, he’s adding 1 inch to the measurement.
Look for shapes in your home and neighborhood.

1. List or draw objects that show squares.
   Answers or drawings will vary.
   Possible answers: checkerboards, waffles, windows

2. List or draw objects that show rectangles.
   Answers or drawings will vary.
   Possible answers: tabletops, paper, beds, street signs, flags, doors

3. List or draw objects that show triangles.
   Answers or drawings will vary.
   Possible answers: crackers, street signs, parts of a roof

4. List or draw objects that show pentagons.
   Answers or drawings will vary.
   Possible answers: the government building, shapes on soccer balls

5. List or draw objects that show hexagons.
   Answers or drawings will vary.
   Possible answers: floor tiles, beehives
Find the unknown addend (unknown partner).

1. \[4 + \square = 12\] \[8 + \square = 15\] \[14 - \square = 9\]

2. \[6 + \square = 12\] \[5 + \square = 11\] \[13 - \square = 7\]

Find the total or partner.

3. \[\begin{array}{c}
7 + 4 \\
6 + 8 \\
9 + 4 \\
\hline
11 \\
14 \\
13 \\
\end{array}\]

\[\begin{array}{c}
16 - 8 \\
12 - 3 \\
17 - 9 \\
\hline
8 \\
9 \\
8 \\
\end{array}\]

What numbers are shown?

4. \[\begin{array}{c}
\text{H} \\
\text{T} \\
\text{O} \\
\hline
123 = 100 + 20 + 3
\end{array}\]

5. \[\begin{array}{c}
\text{H} \\
\text{T} \\
\text{O} \\
\hline
167 = 100 + 60 + 7
\end{array}\]

6. **Stretch Your Thinking** Ian has 2 long straws and 2 short straws. How can he use all of the straws to make a triangle?

Possible answer: Ian can put the two short straws together for one side and use each long straw for the other two sides.
Use a centimeter ruler. Find the distance around each shape.

1. 

\[ \text{Distance around the square} = 2 \text{ cm} + 2 \text{ cm} + 2 \text{ cm} + 2 \text{ cm} = 8 \text{ cm} \]

2. 

\[ \text{Distance around the rectangle} = 3 \text{ cm} + 2 \text{ cm} + 3 \text{ cm} + 2 \text{ cm} = 10 \text{ cm} \]

Estimate and then measure each side. Then find the distance around the rectangle.

3. a. Complete the table. Use a centimeter ruler to measure.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI</td>
<td>Estimates</td>
<td>1 cm</td>
</tr>
<tr>
<td>IJ</td>
<td>may</td>
<td>4 cm</td>
</tr>
<tr>
<td>JK</td>
<td>vary.</td>
<td>1 cm</td>
</tr>
<tr>
<td>KH</td>
<td></td>
<td>4 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the rectangle.

\[ \text{Distance around the rectangle} = 1 \text{ cm} + 4 \text{ cm} + 1 \text{ cm} + 4 \text{ cm} = 10 \text{ cm} \]
Write the unknown addend (unknown partner).

1. \(5 + \boxed{8} = 13\)  \(4 + \boxed{8} = 12\)  \(13 - \boxed{6} = 7\)

2. \(8 + \boxed{6} = 14\)  \(8 + \boxed{9} = 17\)  \(16 - \boxed{9} = 7\)

Solve. Make a proof drawing.  

3. Coach Walker gets a shipment of 153 uniforms. He puts them in boxes of 10. How many boxes can he fill? How many uniforms will be left over?

15 boxes  3 uniforms left over

4. Draw a line segment 7 cm long. Mark and count 1-cm lengths to check the length.

4

5. Stretch Your Thinking  Alex has a small notebook that is shaped like a rectangle. She knows one side is 6 cm and another side is 4 cm. Explain how to find the distance around the notebook without using a ruler.

Since the notebook is a rectangle, the other two sides will also measure 6 cm and 4 cm. Alex can add the lengths of the four sides. 6 cm + 4 cm + 6 cm + 4 cm = 20 cm; 20 cm
Estimate and measure each side. Then find the distance around the triangle.

1. a. Complete the table.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Estimates</td>
<td>3 cm</td>
</tr>
<tr>
<td>BC</td>
<td>may</td>
<td>3 cm</td>
</tr>
<tr>
<td>CA</td>
<td>vary.</td>
<td>3 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.

\[ 3 \text{ cm} + 3 \text{ cm} + 3 \text{ cm} = 9 \text{ cm} \]

2. a. Complete the table.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>Estimates</td>
<td>4 cm</td>
</tr>
<tr>
<td>EF</td>
<td>may</td>
<td>2 cm</td>
</tr>
<tr>
<td>FD</td>
<td>vary.</td>
<td>4 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.

\[ 4 \text{ cm} + 2 \text{ cm} + 4 \text{ cm} = 10 \text{ cm} \]

3. a. Complete the table.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>JK</td>
<td>Estimates</td>
<td>1 cm</td>
</tr>
<tr>
<td>KL</td>
<td>may</td>
<td>3 cm</td>
</tr>
<tr>
<td>LJ</td>
<td>vary.</td>
<td>3 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.

\[ 1 \text{ cm} + 3 \text{ cm} + 3 \text{ cm} = 7 \text{ cm} \]
Find the total or partner.

1. \[ \begin{align*}
8 &+ 5 = 13 \\
4 &+ 7 = 11 \\
6 &+ 6 = 12 \\
14 &- 5 = 9 \\
13 &- 7 = 6 \\
16 &- 9 = 7 
\end{align*} \]

Make a drawing for each number. Write <, >, or =.

2. \[ 131 > 122 \]

3. \[ 27 < 35 \]

4. List or draw objects that show rectangles.
   Answers or drawings will vary. Possible answers:
   book, sign, card, picture frame

5. **Stretch Your Thinking** Draw and label two different triangles. Each shape should have a distance around it of 12 cm.
   Possible drawings shown.
Name the shapes using the words in the box.

- cube
- quadrilateral
- pentagon
- hexagon

1. hexagon
2. quadrilateral
3. pentagon
4. hexagon
5. cube
6. pentagon
7. quadrilateral
8. cube
Make a drawing. Write an equation. Solve the problem.

1. Tanya bakes 12 muffins. She sells 9 of them at the bake sale. How many muffins does she have now?

\[ 12 - 9 = 3 \] muffins

Add.

2. \[ 53 + 28 = 81 \]
3. \[ 87 + 45 = 132 \]
4. \[ 36 + 79 = 115 \]

Estimate and then measure each side. Then find the distance around the rectangle.

5. a. Complete the table. Use a centimeter ruler to measure.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>(AB)</td>
<td>Estimates</td>
<td>3 cm</td>
</tr>
<tr>
<td>(BC)</td>
<td>may</td>
<td>1 cm</td>
</tr>
<tr>
<td>(CD)</td>
<td>vary.</td>
<td>3 cm</td>
</tr>
<tr>
<td>(DA)</td>
<td></td>
<td>1 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the rectangle.

\[ 3 \text{ cm} + 1 \text{ cm} + 3 \text{ cm} + 1 \text{ cm} = 8 \text{ cm} \]

6. Stretch Your Thinking Write all the names you can think of that could describe a four-sided shape.

Possible answers: square, rectangle, quadrilateral
Complete the table. Estimate the height of six people, pets, or objects. Find the actual heights. Choose the nearest centimeter endpoint. Then, measure the difference between your estimate and the actual measurement. 

**Answers will vary.**

<table>
<thead>
<tr>
<th>Person, Pet, or Object</th>
<th>Estimated Height (cm)</th>
<th>Actual Height (cm)</th>
<th>Difference Between Estimated and Actual Height (cm)</th>
</tr>
</thead>
</table>
1. Chase has some music CDs. 9 of them are rock music. The other 8 are pop music. How many CDs does Chase have?

\[ 9 + 8 = 17 \text{ CDs} \]

Add. Use any method.

2. \[ 68 + 35 = 103 \]

3. \[ 52 + 79 = 131 \]

4. \[ 84 + 86 = 170 \]

Estimate and then measure each side. Then find the distance around the triangle.

5. a. Complete the table.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>(AB)</td>
<td>Estimates</td>
<td>3 cm</td>
</tr>
<tr>
<td>(BC)</td>
<td>may</td>
<td>3 cm</td>
</tr>
<tr>
<td>(CA)</td>
<td>vary.</td>
<td>2 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.

\[ 3 \text{ cm} + 3 \text{ cm} + 2 \text{ cm} = 8 \text{ cm} \]

6. Stretch Your Thinking  Find two items in the classroom whose lengths you estimate to have a difference of 3 cm. Then measure each item. Answers will vary. Check measurements.

Item 1 Estimate: ________ cm  Measure: ________ cm

Item 2 Estimate: ________ cm  Measure: ________ cm

Difference between Item 1 and Item 2: ________ cm
1. Find five objects at home to measure in inches. Choose objects that are less than 1 yard (36 in.) long. Estimate and measure the length of each object. Measure to the nearest inch. Complete the table.  

<table>
<thead>
<tr>
<th>Object</th>
<th>Estimated Length (in.)</th>
<th>Measured Length (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Plot the data from the last column in Exercise 1 on the line plot.  

3. Find five objects at home to measure in feet or yards. Complete the table. Remember to include units with your measurements.  

<table>
<thead>
<tr>
<th>Object</th>
<th>Estimated Length</th>
<th>Measured Length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Make a matching drawing or draw comparison bars. Solve the problem. Sample drawing is shown.

1. Erin has 6 grapes. Cody has 8 more grapes than Erin. How many grapes does Cody have?

\[
\begin{align*}
C & \quad ? \\
E & \quad 6 \quad 8 \\
6 + 8 & = 14
\end{align*}
\]

Under the coins, write the total amount of money so far. Then write the total using $.

2. $ \quad 10¢ \quad 10¢ \quad 5¢ \quad 5¢ \quad 1¢ \quad 1¢$

\[
\begin{align*}
10¢ & \quad 20¢ \quad 25¢ \quad 30¢ \quad 31¢ \quad 32¢ \\
\text{total} & \quad \$ \quad 0.32
\end{align*}
\]

Label the shapes using the words in the box.

cube quadrilateral pentagon hexagon

3. hexagon

4. quadrilateral

5. Stretch Your Thinking Explain why we use rulers instead of hands or fingers to measure things.

Possible answer: If we used our hand to measure, not everyone would get the same answer because hands are different sizes.

With rulers, everyone can get the same answer.
1. Measure each line segment.

- 3 in.
- 1 in.
- 4 in.
- 3 in.
- 2 in.

2. Show the data from Exercise 1 on this line plot.

3. Ring more or less.

The number of inches will be more or less than the number of centimeters.
Solve the problem.

1. Mya has a stack of 15 cups. There are 7 short cups and some tall cups in the stack. She uses 3 tall cups. How many tall cups are in the stack now?

   \[ 7 + 8 = 15 \]
   \[ 8 - 3 = 5 \]

   ![Diagram showing 15 cups, 7 short cups, and 8 tall cups]

2. Add.

   \[ 74 + 15 = 89 \]
   \[ 47 + 26 = 73 \]
   \[ 58 + 34 = 92 \]

5. Find two objects to measure in inches. Estimate and measure the length of each object. Measure to the nearest inch. Complete the table.

   Answers will vary.

<table>
<thead>
<tr>
<th>Object</th>
<th>Estimated length (in.)</th>
<th>Measured length (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Stretch Your Thinking  Juan and Brooke each measured the length of the same paper clip correctly. Juan says the paper clip is about 5. Brooke says it is about 2. Explain how they can both be correct.

   Possible answer: They used different units to measure. Juan was probably using cm and Brooke was probably using inches.
Color the quilt pattern. Use the table below.

<table>
<thead>
<tr>
<th>Shape</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>triangle</td>
<td>green</td>
</tr>
<tr>
<td>quadrilateral</td>
<td>red</td>
</tr>
<tr>
<td>pentagon</td>
<td>purple</td>
</tr>
<tr>
<td>hexagon</td>
<td>yellow</td>
</tr>
</tbody>
</table>

Focus on Mathematical Practices
Make a drawing. Write an equation. Solve the problem. Drawings and equations will vary. Show your work.

1. Evan has 4 markers. That is 7 fewer markers than Jenna has. How many markers does Jenna have?

\[ \begin{array}{c}
\text{E} & & \text{J} \\
4 & & ? \\
\end{array} \]

Add.

2. \[14 + 22 + 57 = 93\]  
3. \[36 + 18 + 24 = 78\]

4. Show the data from the table on the line plot.

5. **Stretch Your Thinking** Show an example of how you could put two triangles together to make a larger triangle. Show an example of how you can put two triangles together to make a quadrilateral. Possible answers are shown.
Draw coins to show 6 different ways to make 25¢ with pennies, nickels, and dimes.

Answers will vary.
Possible answers are given.

1. 25¢
   - 10¢ 10¢
   - 5¢

2. 25¢
   - 10¢ 10¢
   - 1¢ 1¢ 1¢ 1¢ 1¢

3. 25¢
   - 10¢ 5¢ 5¢
   - 1¢ 1¢ 1¢ 1¢ 1¢

4. 25¢
   - 5¢ 5¢ 5¢
   - 5¢ 5¢

5. 25¢
   - 10¢ 5¢
   - 1¢ 1¢ 1¢ 1¢ 1¢

6. 25¢
   - 10¢
   - 5¢ 5¢ 5¢

Write how to count the money.

7. 25¢ 50¢ 75¢ 100¢ or $1.00 125¢ or $1.25 150¢ or $1.50

8. 25¢ 50¢ 75¢ 85¢ 95¢ 96¢
1. Write two equations for each Math Mountain. Equations may vary.

- **7 + 4 = □**
- **4 + 7 = □**
- **15 − 9 = □**
- **9 + □ = 15**
- **8 + □ = 13**
- **13 − 8 = □**

Add.

- 2. **40 + 60 = 100**
- **50 + 30 = 80**
- **10 + 40 = 50**
- **4 + 6 = 10**
- **5 + 3 = 8**
- **1 + 4 = 5**

3. Draw a line segment 6 cm long. Mark and count 1-cm lengths to check the length.

4. **Stretch Your Thinking** Elliot counts a group of coins starting with the quarters. His sister counts the same coins. She starts counting the pennies. Will they get the same amount? Explain.

   Yes; the amount does not change, but it is usually easier to begin counting coins with the greatest value.
Under each picture, write the total amount of money so far. Then write the total using $.

1. 25¢  25¢  10¢  1¢

   25¢  50¢  60¢  61¢  

   total  0  6  1

2. 100¢  5¢

   100¢  105¢  

   total  1  0  5

3. Hope has 1 dollar, 1 quarter, 5 dimes, 3 nickels, and 2 pennies. Draw 100 s, 25 s, 10 s, 5 s, and 1 s.

   100  25  10  10  10  10  10

   5  5  5  1  1

Write the total amount of money.

   total  1  9  2
1. Complete the Math Mountains and equations.

\[
\begin{align*}
15 &= 7 + 8 \\
15 &= 7 + 8 \\
15 &= 15 - 7
\end{align*}
\]

2. Susan wins 78 tickets. She needs 10 tickets for each prize. How many prizes can she get? How many tickets will she have left over?

\[7 \text{ prizes} \quad 8 \text{ tickets left over}\]

3. Write how to count the money.

\[25\text{¢} \quad 50\text{¢} \quad 75\text{¢} \quad 85\text{¢} \quad 95\text{¢} \quad 96\text{¢} \quad 97\text{¢} \quad 98\text{¢}\]

4. Stretch Your Thinking Maria has $1.35. She has only quarters and nickels. Draw two possible groups of coins Maria could have. Use \(\bigcirc\) to show quarters and \(\blacksquare\) to show nickels.

Answers will vary. Possible answers given.
Solve the word problems. Rewrite the 100 or make a drawing. Add to check your answer.

1. There were 100 rubber ducks in the store. The shopkeeper sold 19 of them. How many ducks are in the store now?
   
   \[
   100 = 100 + 0
   \]
   
   Show your work.

2. Ben bought 100 napkins for the picnic. There are 26 napkins left after the picnic. How many napkins were used?
   
   \[
   100 = 80 + 20
   \]
   
   Find the unknown addend. Check by adding.

3. Find the unknown addend. Check by adding.
Add or subtract.

1. \[ \begin{align*}
7 &+ 9 \quad 100\,\text{¢} \\
8 &+ 5 \quad 5\,\text{¢} \\
12 &- 6 \quad 1\,\text{¢}
\end{align*} \]
\[ \begin{align*}
16 &\quad \text{total} \\
13 &\quad \text{total}
\end{align*} \]

What number is shown?

\[ \begin{align*}
2. \quad \text{Hundreds} &\quad \text{Tens} &\quad \text{Ones} \\
\ | | &\ | | &\ | | \quad \text{or} \quad \bigcirc \bigcirc \bigcirc \\
1 &\quad 4 &\quad 3 \\
\text{143} = 100 + 40 + 3
\end{align*} \]

Under each picture, write the total amount of money so far. Then write the total using $.

4. 100¢ 5¢ 1¢

\[ \text{100¢} \quad \text{105¢} \quad \text{106¢} \quad \$\text{1.06} \]

5. **Stretch Your Thinking** Ed knows this answer is wrong right away. How could he know this?

Possible answer: When adding to check, Ed can look at the ones and see that 4 + 8 will not have a 0 in the ones place, so it must be wrong.

\[ \begin{align*}
100 &- 38 \\
64 \\
\end{align*} \]
Solve each word problem. Make a proof drawing if you need to.

1. Amon has 94 tomato seeds. He uses 27 of them for a science project. How many seeds does he have left?
   
   
   67 seeds
   label

2. Benita makes 56 leaf prints. She gives 29 prints to her cousins. How many prints does Benita have now?
   
   
   27 prints
   label

3. Denise has 71 straws. She uses 33 of them to make a bridge. How many straws does she have left?
   
   
   38 straws
   label

4. Cedric has 70 sports cards. He gives away 24 cards to his friends. How many cards does Cedric have now?
   
   
   46 cards
   label
Estimate and then measure each side.
Then find the distance around the rectangle.

1. a. Complete the table. Use a centimeter ruler to measure.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Estimates</td>
<td>4 cm</td>
</tr>
<tr>
<td>BC</td>
<td>may</td>
<td>2 cm</td>
</tr>
<tr>
<td>CD</td>
<td>vary.</td>
<td>4 cm</td>
</tr>
<tr>
<td>DA</td>
<td></td>
<td>2 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the rectangle.

\[4 \text{ cm} + 2 \text{ cm} + 4 \text{ cm} + 2 \text{ cm} = 12 \text{ cm}\]

Solve the word problem. Rewrite the 100 or make a drawing. Add to check your answer.

2. Amy has a box with 100 craft sticks in it. She uses some of them to make a project. There are 64 craft sticks left in the box. How many craft sticks did she use?

\[36\] craft sticks

3. Stretch Your Thinking Write a subtraction word problem with 29 as the answer.

Possible answer: Brian has 60 crayons. He gives 31 crayons to his friend. How many crayons does he have now?
Subtract using any method.  Children’s methods will vary.

1. \[ \begin{array}{c}
38 \\
-21 \\
\hline
17 \\
\end{array} \]

2. \[ \begin{array}{c}
57 \\
-39 \\
\hline
18 \\
\end{array} \]

3. \[ \begin{array}{c}
95 \\
-64 \\
\hline
31 \\
\end{array} \]

4. \[ \begin{array}{c}
50 \\
-13 \\
\hline
37 \\
\end{array} \]

5. \[ \begin{array}{c}
68 \\
-15 \\
\hline
53 \\
\end{array} \]

6. \[ \begin{array}{c}
77 \\
-29 \\
\hline
48 \\
\end{array} \]

7. \[ \begin{array}{c}
74 \\
-48 \\
\hline
26 \\
\end{array} \]

8. \[ \begin{array}{c}
84 \\
-49 \\
\hline
35 \\
\end{array} \]
Write the unknown addend (partner).

1. $5 + \square = 13$  
   $15 - 9 = \square$  
   $4 + \square = 11$

2. $6 + \square = 10$  
   $13 - 6 = \square$  
   $12 - 7 = \square$

3. Under the coins, write the total amount of money so far. Then write the total using $.$

   ![Coins]

   | 10¢ | 20¢ | 25¢ | 30¢ | 31¢ | 32¢ | $0$ | $3$ | $2$ |

   Total: $24$ pennies

   Label

Solve the word problem. Make a proof drawing if you need to.

4. Jackson has 62 pennies in his jar. He spends 38 of them. How many pennies does he have now?

   24

   pennies

   Label

5. Stretch Your Thinking How do you know if you need to ungroup a ten for ones when subtracting?

   Possible answer: I need to ungroup a ten if there are more ones in the number I am subtracting than there are ones in the number I am subtracting from.
Subtract.

1. \[87 - 59 = 28\]
2. \[63 - 14 = 49\]
3. \[55 - 18 = 37\]
4. \[73 - 17 = 56\]
5. \[83 - 12 = 71\]
6. \[99 - 35 = 64\]
7. \[62 - 55 = 7\]
8. \[71 - 49 = 22\]
9. \[45 - 26 = 19\]
10. \[50 - 11 = 39\]
11. \[92 - 44 = 48\]
12. \[75 - 52 = 23\]
Make a drawing. Write an equation. Solve the problem. **Drawings and equations may vary.**

1. Lily has 14 markers. Her sister took some. Now Lily has 8 markers. How many did Lily’s sister take?

   ![Drawing of markers being taken away](image)

   \[8 + \square = 14\]

   **Label**: 6 markers

2. **Add.**

   \[
   \begin{align*}
   57 + 35 &= 92 \\
   73 + 48 &= 121 \\
   89 + 61 &= 150
   \end{align*}
   \]

3. **Subtract using any method.**

   \[
   \begin{align*}
   64 - 27 &= 37 \\
   95 - 37 &= 58 \\
   70 - 41 &= 29
   \end{align*}
   \]

4. **Stretch Your Thinking** Write and solve a subtraction exercise where you do not ungroup. Write and solve a subtraction exercise where you must ungroup.

   **Possible answers shown.**

   \[
   \begin{align*}
   84 - 32 &= 52 \\
   95 - 37 &= 58
   \end{align*}
   \]
Solve each word problem. Draw a proof drawing if you need to.

1. There are 200 water bottles on a table. The runners in a race take 73 of them. How many water bottles are left on the table?

   127 water bottles

2. There are 200 weeds in Kelly’s garden. Her little sister pulls out 44 of them. How many weeds are still in the garden?

   156 weeds

Subtract.

3. 200
   \[\begin{array}{c}
   \text{\underline{- 66}} \\
   134
   \end{array}\]

4. 200
   \[\begin{array}{c}
   \text{\underline{- 82}} \\
   118
   \end{array}\]

5. 200
   \[\begin{array}{c}
   \text{\underline{- 54}} \\
   146
   \end{array}\]

6. 200
   \[\begin{array}{c}
   \text{\underline{- 95}} \\
   105
   \end{array}\]

7. 200
   \[\begin{array}{c}
   \text{\underline{- 38}} \\
   162
   \end{array}\]

8. 200
   \[\begin{array}{c}
   \text{\underline{- 47}} \\
   153
   \end{array}\]
Make a drawing. Write an equation. Solve the problem.

1. Sean finds 5 orange leaves and some yellow leaves. He finds 14 leaves in all. How many yellow leaves does he find?

\[ 5 + 5 + 4 = 14 \]

[9 leaves]

Label

Show your work. Drawing and equation may vary.

\[ 5 + 5 + 4 = 14 \]

\[ 5 + 9 = 14 \]

Add. Use any method.

2. \[ \begin{array}{c}
48 \\
64 \\
75 \\
46 \\
\hline
123 \\
110 \\
\end{array} \]

\[ \begin{array}{c}
74 \\
89 \\
\hline
163 \\
\end{array} \]

Subtract.

3. \[ \begin{array}{c}
56 \\
82 \\
-19 \\
-53 \\
\hline
37 \\
29 \\
\end{array} \]

\[ \begin{array}{c}
61 \\
-46 \\
\hline
15 \\
\end{array} \]

4. **Stretch Your Thinking** Suppose you subtract a 2-digit number from 200. Will you have to ungroup hundreds or tens? Explain. Give an example.

Possible answer: Yes; whenever you subtract a 2-digit number from 200, you will always need to ungroup a hundred for tens because there are no tens in 200. If the 2-digit number has any ones, you will need to ungroup a ten also. Example: \( 200 - 71 \)
Decide if you need to ungroup. Then subtract.

1. \[147 \quad 2. \ 147 \quad 3. \ 147\]
   \[-32 \quad -38 \quad -48\]
   \[115 \quad 109 \quad 99\]

4. \[126 \quad 5. \ 126 \quad 6. \ 126\]
   \[-54 \quad -57 \quad -97\]
   \[72 \quad 69 \quad 29\]

7. \[187 \quad 8. \ 187 \quad 9. \ 187\]
   \[-46 \quad -49 \quad -99\]
   \[141 \quad 138 \quad 88\]

10. \[172 \quad 11. \ 172 \quad 12. \ 172\]
    \[-35 \quad -85 \quad -31\]
    \[137 \quad 87 \quad 141\]
Make a drawing. Write an equation. Solve the problem.

1. The coach gives out 8 large water bottles and 8 small water bottles. How many water bottles does the coach give out?

Add. Use any method.

2. \[
\begin{array}{c}
66 \\
+ 77 \\
\hline
143 \\
\end{array}
\quad \begin{array}{c}
97 \\
+ 84 \\
\hline
181 \\
\end{array}
\quad \begin{array}{c}
53 \\
+ 79 \\
\hline
132 \\
\end{array}
\]

Subtract.

3. \[
\begin{array}{c}
200 \\
- 41 \\
\hline
159 \\
\end{array}
\quad \begin{array}{c}
200 \\
- 73 \\
\hline
127 \\
\end{array}
\quad \begin{array}{c}
200 \\
- 57 \\
\hline
143 \\
\end{array}
\]

4. Stretch Your Thinking Use the numbers below to complete the subtraction problem. Place the numbers so that you must ungroup two times. Then subtract.

Answers will vary.

\[
\begin{array}{c}
3 \\
- 9 \\
\hline
3 \\
\end{array}
\quad \begin{array}{c}
6 \\
- 6 \\
\hline
0 \\
\end{array}
\quad \begin{array}{c}
9 \\
5 \\
\hline
4 \\
\end{array}
\]

Drawings will vary.

16 water bottles

\[
8 + 8 = 16
\]
Decide if you need to ungroup. Then subtract.

1. \[130 - 99 = 31\]
2. \[150 - 39 = 111\]
3. \[160 - 67 = 93\]
4. \[108 - 88 = 20\]
5. \[120 - 83 = 37\]
6. \[101 - 72 = 29\]

Solve each word problem.

7. There were 120 nickels in a jar. Janice took out 49 nickels. How many nickels are in the jar now?

\[71 \text{ nickels}\]

8. Last week, there were 109 books at the bookstore. So far, 25 books have been sold. How many books have not been sold?

\[84 \text{ books}\]
Add. Use doubles.

1. \(6 + 7 = 13\)  
2. \(9 + 7 = 16\)

Estimate and then measure each side. Then find the distance around the triangle.

3. \(\text{AB} \quad \text{BC} \quad \text{CA}\)

\[\frac{2\text{ cm}}{\text{C}} \frac{2\text{ cm}}{\text{B}} \frac{2\text{ cm}}{\text{A}}\]

a. Complete the table.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>(AB)</td>
<td>Estimates</td>
<td>2 cm</td>
</tr>
<tr>
<td>(BC)</td>
<td>may</td>
<td>2 cm</td>
</tr>
<tr>
<td>(CA)</td>
<td>vary.</td>
<td>2 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.

\[2\text{ cm} + 2\text{ cm} + 2\text{ cm} = 6\text{ cm}\]

Decide if you need to ungroup. Then subtract.

4. \(1 6 9\)  
   \(- 4 4\)  
   \(1 2 5\)

5. Stretch Your Thinking Look at Evan’s subtraction problem. What did he do wrong? Find the correct answer.

   Possible answer: Evan did not record the new number of tens. The correct answer is 39.
What would you like to buy? First, see how much money you have. Pay for the item. How much money do you have left?

Yard Sale

Globe 85¢
Ring 67¢
Sports Bag 98¢
Eraser 79¢
Color Pencils 66¢

Answers will vary.

1. I have 124¢ in my pocket.
   I bought the Globe.
   1 2 4¢
   —   ¢
   I have ________ ¢ left.

2. I have 152¢ in my pocket.
   I bought the Sports Bag.
   1 5 2¢
   —   ¢
   I have ________ ¢ left.

3. I have 145¢ in my pocket.
   I bought the Eraser.
   1 4 5¢
   —   ¢
   I have ________ ¢ left.

4. I have 131¢ in my pocket.
   I bought the Color Pencils.
   1 3 1¢
   —   ¢
   I have ________ ¢ left.
Find the total or partner.

1. \[
\begin{align*}
7 + 6 &= 13 \\
9 + 5 &= 14 \\
8 + 9 &= 17 \\
15 - 6 &= 9 \\
12 - 8 &= 4 \\
16 - 9 &= 7
\end{align*}
\]

Label the shapes using the words in the box.

cube  quadrilateral  pentagon  hexagon

2. cube

3. quadrilateral

Solve the word problem.

4. Logan buys a notebook with 106 pages. He uses 29 of the pages. How many pages are not used?

\[
77 \text{ pages}
\]

5. Stretch Your Thinking Kayla has 135¢. She buys a toy and has 78¢ left. What is the price of the toy she buys?

\[
57¢
\]
Subtract.

1. \[29 - 13 = 16\]
2. \[54 - 26 = 28\]
3. \[75 - 25 = 50\]
4. \[48 - 38 = 10\]
5. \[90 - 57 = 33\]
6. \[17 - 8 = 9\]
7. \[100 - 42 = 58\]
8. \[63 - 22 = 41\]
9. \[97 - 59 = 38\]

10. Explain how you found the difference for Exercise 7.

   Check children’s work. Children’s explanations should include ungrouping a hundred and ungrouping a ten.
Remembering

Make a matching drawing or draw comparison bars. Solve the problem.

1. Jayden has 8 grapes. Ashley has 6 more grapes than Jayden has. How many grapes does Ashley have?

   \[ 14 \] grapes

   \[ \text{label} \]

   \[ 8 + 6 = \] 

   

Which sticker would you like to buy? First, see how much money you have. Pay for the sticker. How much money do you have left?

**Sticker Sale**

<table>
<thead>
<tr>
<th></th>
<th>Smile</th>
<th>Heart</th>
<th>Sun</th>
<th>Moon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>78¢</td>
<td>89¢</td>
<td>76¢</td>
<td>97¢</td>
</tr>
</tbody>
</table>

Answers will vary.

2. I have 132¢ in my pocket.
   I bought the \[ \text{Smile} \].
   \[ 132¢ \]
   \[ - \_¢ \]
   I have \[ \_¢ \] left.

3. I have 164¢ in my pocket.
   I bought the \[ \text{Moon} \].
   \[ 164¢ \]
   \[ - \_¢ \]
   I have \[ \_¢ \] left.

4. **Stretch Your Thinking** Subtract.
   
   Which subtraction takes longer to do? Explain.
   
   Possible answer: B; I have to ungroup.
Draw a Math Mountain to solve each word problem. Show how you add or subtract.

1. Papi has 148 slices of pizza in his shop. He sells 56 slices. How many slices does Papi have left?

   \[
   148 - 56 = 92
   \]

2. There are 34 children at the park. Then 16 children join them. How many children are at the park now?

   \[
   34 + 16 = 50
   \]

3. Bella has 19 crayons. She gives 12 of them to her friend. How many crayons does she have left?

   \[
   19 - 12 = 7
   \]

4. Seventy-nine girls and forty-eight boys are in Grade 2 at Center School. How many children are in Grade 2?

   \[
   79 + 48 = 127
   \]
1. Luke has 7 trucks. Zoe has 6 more trucks than Luke. How many trucks does Zoe have?

\[ \text{13 trucks} \]

Zoe has 13 trucks.

2. Show the data from the table on the line plot.

<table>
<thead>
<tr>
<th>Length of Stickers (in inches)</th>
<th>5 inches</th>
<th>3 inches</th>
<th>4 inches</th>
<th>2 inches</th>
<th>3 inches</th>
</tr>
</thead>
</table>

Length of Stickers (in inches)


\[
\begin{array}{c}
54 \\
-31 \\
\hline
23
\end{array}
\quad
\begin{array}{c}
81 \\
-26 \\
\hline
55
\end{array}
\quad
\begin{array}{c}
74 \\
-7 \\
\hline
67
\end{array}
\]

4. Stretch Your Thinking Write and solve a subtraction word problem that starts with 146. The answer should be less than 100.

Possible answer: There are 146 balls in the bin. 58 balls spill out. How many balls are in the bin now? 88 balls.
1. Write all of the equations for 74, 25, and 49.

\[
\begin{align*}
25 + 49 &= 74 \\
49 + 25 &= 74 \\
74 - 25 &= 49 \\
74 - 49 &= 25
\end{align*}
\]

\[
\begin{align*}
74 &= 25 + 49 \\
74 &= 49 + 25 \\
49 &= 74 - 25 \\
25 &= 74 - 49
\end{align*}
\]

2. Write all of the equations for 157, 68, and 89.

\[
\begin{align*}
68 + 89 &= 157 \\
89 + 68 &= 157 \\
157 - 68 &= 89 \\
157 - 89 &= 68
\end{align*}
\]

\[
\begin{align*}
157 &= 68 + 89 \\
157 &= 89 + 68 \\
89 &= 157 - 68 \\
68 &= 157 - 89
\end{align*}
\]
Add in any order. Write the total.

1. \( 6 + 3 + 5 = 14 \)  \( 9 + 2 + 9 = 20 \)  \( 3 + 5 + 7 = 15 \)
2. \( 8 + 7 + 2 = 17 \)  \( 7 + 3 + 8 = 18 \)  \( 5 + 8 + 4 = 17 \)

Make a drawing for each number. Write <, >, or =.

3. \( 122 < 131 \)

4. \( 35 > 28 \)

Draw a Math Mountain to solve the word problem. Show how you add or subtract.

5. Berry Elementary School has 127 children. 69 of the children are girls. How many children are boys?

\[ 58 \text{ boys} \]

Show your work.

6. Stretch Your Thinking  When would there be only four different equations for a set of Math Mountain numbers? Give an example.

\( 30 + 30 = 60 \)
\( 60 - 30 = 30 \)
\( 60 = 30 + 30 \)
\( 30 = 60 - 30 \)
Add or subtract. Watch the sign!

1. \[75 + 25 = 100\]
2. \[14 + 6 = 20\]
3. \[47 + 38 = 85\]
4. \[87 - 48 = 39\]
5. \[34 + 18 = 52\]
6. \[27 - 8 = 19\]
7. \[100 - 85 = 15\]
8. \[67 - 29 = 38\]
9. \[58 + 37 = 95\]
10. \[81 - 53 = 28\]
11. \[47 + 37 = 84\]
12. \[99 - 39 = 60\]
Remembering

Make a drawing. Write an equation. Solve the problem.

1. Mayumi shops with her mom. She puts 8 oranges in the basket. Her mom puts in 7 more oranges. How many oranges are in the basket now?

   
   15 oranges

   In all

   8 + 7 = 15

2. Write all of the equations for 83, 35, 48.

   \[
   \begin{align*}
   35 + 48 &= 83 \\
   48 + 35 &= 83 \\
   83 - 35 &= 48 \\
   83 - 48 &= 35 \\
   83 &= 35 + 48 \\
   83 &= 48 + 35 \\
   48 &= 83 - 35 \\
   35 &= 83 - 48
   \end{align*}
   \]


   No; she added but forgot to count the new ten (6 + 7 = 13). The answer should be 63.
Mr. Green wants to buy some things at a flea market. He will pay for the items with one dollar (100 cents). How much change will he get back?

1. Mr. Green buys the mittens and the plant.
   
   \[
   \begin{align*}
   17 \text{¢} &+ 52 \text{¢} \\
   \text{Total:} & \quad 69 \text{¢} \\
   100\text{¢} - 69 \text{¢} & = 31 \text{¢}
   \end{align*}
   \]

   His change will be \[31\text{¢} \].

2. Mr. Green buys the toy lamb and the toy camera.
   
   \[
   \begin{align*}
   28 \text{¢} & + 46 \text{¢} \\
   \text{Total:} & \quad 74 \text{¢} \\
   100\text{¢} - 74 \text{¢} & = 26 \text{¢}
   \end{align*}
   \]

   His change will be \[26\text{¢} \].

3. Mr. Green buys the toy binoculars and the toy lamb.
   
   \[
   \begin{align*}
   39 \text{¢} & + 28 \text{¢} \\
   \text{Total:} & \quad 67 \text{¢} \\
   100\text{¢} - 67 \text{¢} & = 33 \text{¢}
   \end{align*}
   \]

   His change will be \[33\text{¢} \].

4. Mr. Green buys the toy camera and the plant.
   
   \[
   \begin{align*}
   46 \text{¢} & + 52 \text{¢} \\
   \text{Total:} & \quad 98 \text{¢} \\
   100\text{¢} - 98 \text{¢} & = 2 \text{¢}
   \end{align*}
   \]

   His change will be \[2\text{¢} \].
Add or subtract.

1.  \[
\begin{array}{ccccccc}
5 & 9 & 6 & 13 & 18 & 14 \\
+ 4 & + 6 & + 8 & - 8 & - 9 & - 9 \\
9 & 15 & 14 & 5 & 9 & 5 \\
\end{array}
\]

Cross out the extra information or write hidden or missing information. Then solve the problem.

2. Latisha has some apples. She buys 5 more. How many apples does she have now?

\[
\text{Latisha has 7 apples.}
\]

3. \[
\begin{array}{ll}
73 & 56 & 100 \\
- 38 & + 27 & - 47 \\
35 & 83 & 53 \\
\end{array}
\]

4. **Stretch Your Thinking** Rashid has one dollar (100 cents). He wants to buy a ball for 50 cents. He also wants to buy two other toys and still have money left over. Explain what Rashid needs to do when choosing the two toys.

\[
\text{Rashid needs to find two toys that total 49 cents or less so that he may also buy the ball and have at least 1 cent left over.}
\]
Add up to solve each word problem.

1. Rudy has 45 ants in his ant farm. He adds some more ants to the ant farm. Now there are 69 ants. How many ants does Rudy add to the ant farm?

   \[
   \begin{array}{c}
   24 \\
   \hline
   \text{ants} \\
   \text{label}
   \end{array}
   \]

2. Tina has 92 flowers in her garden this morning. After she takes some flowers to school, there are 33 flowers in her garden. How many flowers does Tina take to school?

   \[
   \begin{array}{c}
   59 \\
   \hline
   \text{flowers} \\
   \text{label}
   \end{array}
   \]

3. Lia collects 86 buttons. Then she gives some to Matt. Now Lia has 61 buttons. How many buttons does Lia give to Matt?

   \[
   \begin{array}{c}
   25 \\
   \hline
   \text{buttons} \\
   \text{label}
   \end{array}
   \]

4. There were 73 cars in the garage this morning. Now there are 24 cars in the garage. How many cars left the garage?

   \[
   \begin{array}{c}
   49 \\
   \hline
   \text{cars} \\
   \text{label}
   \end{array}
   \]
Add. Use doubles.

1. \(5 + 6 = 11\)  \(9 + 7 = 16\)  \(10 + 8 = 18\)
2. \(7 + 8 = 15\)  \(8 + 8 = 16\)  \(7 + 6 = 13\)

Mia and Tom buy things at the school store. They will each pay for the items with one dollar (100 cents). How much change will they each get back?

Mia buys the marker and the sticker.

\[
\begin{align*}
51 \, \text{¢} & \quad + \quad 16 \, \text{¢} \\
\text{Total:} & \quad 67 \, \text{¢}
\end{align*}
\]

\[100\, \text{¢} - 67\, \text{¢} = 33\, \text{¢}\]

Her change will be 33¢.

Tom buys the eraser and the glue stick.

\[
\begin{align*}
37 \, \text{¢} & \quad + \quad 48 \, \text{¢} \\
\text{Total:} & \quad 85 \, \text{¢}
\end{align*}
\]

\[100\, \text{¢} - 85\, \text{¢} = 15\, \text{¢}\]

His change will be 15¢.

5. Stretch Your Thinking Use the pictures and prices above.

Suppose Mia has another 100 cents and buys one item. If she has 66¢ left, how can you tell which item she bought? Explain.

I know that if there are 6 ones left, the item must have 4 ones in it. So I know she bought the pen. \(34 + 66 = 100\).
Solve each word problem.  

1. Alma and Larry have stickers to put on their poster. Alma has 28 stickers. They have 84 stickers in all. How many stickers does Larry have?

   56 stickers

   label

2. There are 61 magazines in the library. Then more magazines are delivered. Now there are 100 magazines. How many new magazines are delivered to the library?

   39 magazines

   label

3. Mori puts 95 pretzels in a bowl. Her friends eat some. Now there are 72 pretzels in the bowl. How many pretzels do her friends eat?

   23 pretzels

   label

4. Eric’s basketball team scores 36 points in the first game. They score some points in the second game. In the two games, they score 52 points in all. How many points do they score in the second game?

   16 points

   label
Use your centimeter ruler. Measure the horizontal line segment below by marking and counting 1-cm lengths.

1. 

|   |   |   |   |   | 5 cm |

Add ones or tens.

2. 

\[5 + 6 = 11\]  
\[8 + 7 = 15\]  
\[9 + 4 = 13\]  
\[50 + 60 = 110\]  
\[80 + 70 = 150\]  
\[90 + 40 = 130\]

Add up to solve the word problem.

3. Austin has 65 United States stamps. He gets more stamps from other countries. Now he has 84 stamps. How many stamps are from other countries?

\[ \begin{array}{c}
19 \\
\text{stamps}
\end{array}\]


Possible answer: I used the Adding Up Method, so I used addition to find the answer to a subtraction problem.
1. Abigail’s mother gives her some carrots to sell at the state fair. Abigail picks 16 more carrots from the garden. Now Abigail has 73 carrots to sell. How many carrots did her mother give her?

\[ \square + 16 = 73 \]

57 carrots

2. Stanley the grocer has lots of onions. He sells 44 onions in the morning. Now he has 48 onions left to sell. How many onions did Stanley have to begin with?

\[ \square - 44 = 48 \]

92 onions

3. At the end of the first half of the basketball game, Carmen’s team has 23 points. At the end of the second half, they have 52 points. How many points did Carmen’s team score in the second half of the game?

\[ 23 + \square = 52 \]

29 points

4. Mr. Art has 88 sheets of paper in his cabinet. He gives some paper to his students. Then he has 61 sheets of paper left. How many sheets of paper did Mr. Art give to his students?

\[ 88 - \square = 61 \]

27 sheets of paper
Find the unknown addend (unknown partner).

1. $5 + \square = 13$  
   $16 - 7 = \square$  
   $6 + \square = 14$

2. $9 + \square = 16$  
   $15 - 8 = \square$  
   $13 - 7 = \square$

3. **Draw a Picture and Explain** Draw two different Math Mountains with a total of 13. Explain why you can make two different Math Mountains.  
   **Answers will vary.**

   ![Math Mountains]
   
   Sample answer: Each Math Mountain has different partners but has a total of 13.

Solve the word problem.

4. Erin has 56 crayons. She gets some new ones. Now she has 82 crayons. How many new crayons did she get?
   
   $\square$ crayons
   
   **Show your work.**

5. **Stretch Your Thinking** Write and solve a word problem that has an unknown start number. Use 2-digit numbers.
   
   **Answers will vary.** Possible answer: The florist has some roses. She gets a delivery of 23 more roses. Now she has 71 roses. How many roses did she start with? 48 roses
1. Tran has 29 seashells. Vimi has 63 seashells. How many fewer seashells does Tran have than Vimi?

$$63 - 29 = \text{?}$$

$$34$$ fewer seashells

2. Justine and Morgan are buying feathers at the craft store. Morgan buys 17 more feathers than Justine. Morgan buys 76 feathers. How many feathers does Justine buy?

$$76 - 17 = \text{?}$$

$$59$$ feathers

3. Ali has 54 guppies in her fish tank. Peter has 28 more guppies than Ali. How many guppies does Peter have in his fish tank?

$$54 + 28 = \text{?}$$

$$82$$ guppies

4. Stanley the grocer buys 91 bags of flour for his store. Ted buys 46 fewer bags of flour than Stanley. How many bags of flour does Ted buy?

$$91 - 46 = \text{?}$$

$$45$$ bags of flour
Remembering

Draw lines to make pairs. Write odd or even.

1. [Diagram of 8 dots lined up in pairs, with one dot remaining odd.]
   - Even

2. [Diagram of 7 dots lined up in pairs, with one dot remaining odd.]
   - Odd

Be the helper. Is the answer OK? Write yes or no.
If no, fix the mistake and write the correct answer.

3. \[59 + 23 = 82\]
   - Yes

4. \[16 + 58 = 74\]
   - No

5. \[37 + 49 = 86\]
   - No

Write an equation. Solve the word problem.

6. Mrs. Patel has some plates. She uses 37 of them at the picnic. She has 58 plates left. How many plates were in the stack to start with?
   \[95 - 37 = 58\]
   - 95 plates

7. Stretch Your Thinking  Write and solve a word problem that matches the drawing. Ed has some cars. Ryan has 29 more cars than Ed. Ryan has 63 cars. How many cars does Ed have? 34 cars
Make a drawing. Write an equation. Solve. Drawings and equations will vary.

1. Mariko has 63 photos in her photo book. That is 23 fewer photos than Sharon has. How many photos does Sharon have?
   
   \[
   86 \quad \text{photos} \\
   \text{label}
   \]

2. Fred has some crayons. He gives Drew 26 crayons. Now Fred has 42 crayons. How many crayons did Fred start with?
   
   \[
   68 \quad \text{crayons} \\
   \text{label}
   \]

3. Marisa brings out 60 bowls for the party. Thirty-five of the bowls are large. The rest are small. How many small bowls does Marisa bring out?
   
   \[
   25 \quad \text{small bowls} \\
   \text{label}
   \]

4. Sean sells 35 tickets for the school play. If he sells 24 more tickets, he will sell all the tickets he had at the start. How many tickets did Sean start with?
   
   \[
   59 \quad \text{tickets} \\
   \text{label}
   \]
Add.

1. \(15 + 29 + 34 = \boxed{78}\)

2. \(23 + 38 + 27 + 59 = \boxed{147}\)

Solve the word problem.

3. Carter has 5 jersey shirts, 4 solid shirts, and some plaid shirts. He has 15 shirts altogether. How many plaid shirts does he have?

   \[\begin{align*}
   5 + 4 &= 9 \\
   J + S &= 9 \\
   15 &= 9 + P \\
   15 = 9 + \boxed{6}
   \end{align*}\]

   **plaid shirts**

   **label**

4. Max has 72 pennies. Jada has 34 fewer pennies than Max. How many pennies does Jada have?

   \[\begin{align*}
   \text{Max} &= 72 \\
   \text{Jada} &= ? \\
   72 - 34 &= \boxed{38}
   \end{align*}\]

   **pennies**

   **label**

5. **Stretch Your Thinking** Write and solve a word problem that matches the drawing.

   Possible answer: Erin has some toy cars. Ryan has 29 more toy cars than Erin. Ryan has 55 toy cars. How many toy cars does Erin have? 26 toy cars
Think about the first-step question. Then solve the problem.

1. Luisa has 35 building blocks. Jack gives her 18 more blocks. Luisa uses 26 blocks to build a castle. How many blocks are not used in the castle?

   27 blocks

   label

2. There are 45 red apples and 24 green apples for sale at a farm stand. The farmer sells some apples. Now she has 36 apples left. How many apples does the farmer sell?

   33 apples

   label

3. Maria has 16 more beads than Gus. Gus has 24 beads. Denise has 12 more beads than Maria. How many beads does Denise have?

   52 beads

   label
Find the total or partner.

1. \[
\begin{array}{cccccc}
7 & + & 8 & = & 15 \\
6 & + & 8 & = & 14 \\
9 & + & 6 & = & 15 \\
16 & - & 8 & = & 8 \\
12 & - & 7 & = & 5 \\
17 & - & 9 & = & 8 \\
\end{array}
\]

2. Look for shapes in your classroom and school. List or draw objects that show triangles.

Answers or drawings will vary.
Possible answers: sign, pizza slice, part of a sandwich

Make a drawing. Write an equation. Solve. Drawings and equations will vary.

3. Eric has 53 baseball cards.
17 cards are new. The rest are old.
How many baseball cards are old?

36 baseball cards

4. Stretch Your Thinking Write a 2-step word problem that uses subtraction then addition. Solve.

Possible answer: Sara has 42 stickers. She uses 23 of them. Then she buys 12 more stickers. How many stickers does she have now? 31 stickers
Think about the first-step question.  
Then solve the problem.

1. There are 45 children at the park in the morning.  
25 are boys and the rest are girls. Some more girls come to the park in the afternoon. Now there are 30 girls at the park. How many girls come to the park in the afternoon?

   ![10 girls label]

2. Jonah has 36 sheets of green paper and 26 sheets of blue paper. He gives some sheets of green paper to Tova. Now he has 42 sheets of paper. How many sheets of green paper does he give Tova?

   ![20 sheets of green paper label]

3. There are 16 mystery books, 22 history books, and 21 science books in a large bookcase. A smaller bookcase has 30 fewer books. How many books are in the smaller bookcase?

   ![29 books label]
Estimate and then measure each side. Then find the distance around the rectangle.

1. a. Complete the table. Use a centimeter ruler to measure.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Estimates</td>
<td>4 cm</td>
</tr>
<tr>
<td>BC</td>
<td>may</td>
<td>3 cm</td>
</tr>
<tr>
<td>CD</td>
<td>vary.</td>
<td>4 cm</td>
</tr>
<tr>
<td>DA</td>
<td></td>
<td>3 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the rectangle.

\[4 \text{ cm} + 3 \text{ cm} + 4 \text{ cm} + 3 \text{ cm} = 14 \text{ cm}\]

Think about the first-step question. Then solve the problem.

2. Kate has 37 old crayons and 45 new crayons. She gives some crayons to Sam. Now she has 56 crayons. How many crayons did she give to Sam?

26 crayons

3. Stretch Your Thinking Use the information in the table to write a 2-step word problem. Then solve.

Possible answer: How many more points would Will need to have as many as Ava and Cody together? 17 points
The children on the math team each measured the length of one of their feet. They made a table to show their data.

<table>
<thead>
<tr>
<th>Name</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marta</td>
<td>19 cm</td>
</tr>
<tr>
<td>Pete</td>
<td>18 cm</td>
</tr>
<tr>
<td>Alberto</td>
<td>20 cm</td>
</tr>
<tr>
<td>Miko</td>
<td>13 cm</td>
</tr>
<tr>
<td>Sasha</td>
<td>16 cm</td>
</tr>
</tbody>
</table>

Use the table to solve each word problem.

1. How much longer is Alberto’s foot than Pete’s?

   2 cm or centimeters

2. Which child has a foot that is 3 cm longer than Sasha’s?

   Marta

3. Miko’s foot is 2 cm shorter than Jon’s. What is the length of Jon’s foot?

   15 cm or centimeters

4. Use the information in the table to write your own problem. Solve the problem.

   Children’s problems will vary.
Complete the addition doubles equation.

1. \[ 7 + 7 = 14 \]
2. \[ 4 + 4 = 8 \]
3. \[ 3 + 3 = 6 \]
4. \[ 9 + 9 = 18 \]

Add.

5. \[ \begin{array}{c}
   46 \\
   + 28 \\
   \hline
   74
\end{array} \]
6. \[ \begin{array}{c}
   34 \\
   + 57 \\
   \hline
   91
\end{array} \]
7. \[ \begin{array}{c}
   69 \\
   + 52 \\
   \hline
   121
\end{array} \]

Think about the first-step question. Then solve the problem.

6. The coach gets a delivery of 24 large uniforms, 18 medium uniforms, and 25 small uniforms. He returns 19 of the uniforms. How many uniforms does the coach have now?

\[ 48 \text{ uniforms} \]

7. **Stretch Your Thinking** Use a centimeter ruler to measure four objects. Record each length. Then write a question and solve.

<table>
<thead>
<tr>
<th>Object</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Write the time in two different ways.

1. 4 o’clock
2. 3 o’clock
3. 11 o’clock

Draw the hands on each analog clock and write the time on each digital clock below.

4. 1 o’clock
5. 6 o’clock
6. 12 o’clock

For each activity, ring the appropriate time.

7. eat an afternoon snack
   - 3:00 A.M.
   - 2:00 P.M.
   - 6:00 P.M.

8. go to a movie after dinner
   - 8:00 A.M.
   - 12:00 NOON
   - 7:00 P.M.
Add.

1. \[4 + 6 + 3 + 5 + 8 + 9 = 31\]
2. \[11 + 15 + 10 + 7 + 16 = 53\]

What number is shown?

2. \[\text{Hundreds: } 1, \text{Tens: } 3, \text{Ones: } 6\]
   \[136 = 100 + 30 + 6\]
3. \[\text{Hundreds: } 1, \text{Tens: } 5, \text{Ones: } 2\]
   \[152 = 100 + 50 + 2\]

Label the shapes using the words in the box.

- cube
- quadrilateral
- pentagon
- hexagon

4. hexagon
5. quadrilateral

6. Stretch Your Thinking Name the same activity you might do at 9:00 A.M. and at 9:00 P.M.
   
   Answers will vary. Possible answer: brushing teeth
Write the time on the digital clocks.

1. \[6:25\]
2. \[1:50\]
3. \[5:10\]
4. \[9:40\]

Draw hands on each clock to show the time.

5. \[8:15\]
6. \[11:20\]
7. \[12:30\]
8. \[1:45\]

For each activity, ring the appropriate time.

9. trip to the zoo
   - 11:10 A.M.
   - 11:10 P.M.

10. building sand castles
    - 10:00 A.M.
    - 10:00 P.M.

11. bedtime story
    - 8:15 A.M.
    - 8:15 P.M.

12. shadow puppets
    - 9:30 A.M.
    - 9:30 P.M.
Complete the addition doubles equation.

1. \[4 + 4 = 8\]  
2. \[9 + 9 = 18\]  
3. \[6 + 6 = 12\]  
4. \[8 + 8 = 16\]  

Add. Use any method.

5. \[
\begin{array}{c}
53 \\
+ 89 \\
\hline
142 \\
\end{array}
\]

6. \[
\begin{array}{c}
72 \\
+ 48 \\
\hline
120 \\
\end{array}
\]

7. \[
\begin{array}{c}
95 \\
+ 66 \\
\hline
161 \\
\end{array}
\]

Write the time in two different ways.

8. 6 o’clock  
9. 10 o’clock  
10. 2 o’clock

11. Stretch Your Thinking  Name three different times when both hands are between the 12 and the 3 on the clock.

Answers will vary. Possible answers: 1:05; 2:10; 12:03
Use the picture graph to answer the questions.

**Book Sales**

<table>
<thead>
<tr>
<th>Name</th>
<th>Peter</th>
<th>Tammy</th>
<th>Shana</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>📚 📚 📚 📚</td>
<td>📚 📚 📚</td>
<td>📚 📚 📚 📚 📚 📚</td>
</tr>
</tbody>
</table>

1. Who sold the most books? **Shana**

2. Who sold the fewest books? **Tammy**

3. How many more books did Shana sell than Tammy?
   - 5 more books

4. How many fewer books did Peter sell than Shana?
   - 4 fewer books

5. How many more books did Peter sell than Tammy?
   - 1 more book

6. How many books did the children sell altogether?
   - 18 books

7. **Write Your Own** Write and solve your own question about the graph. Answers will vary.
Add ones or tens.

1. \(5 + 9 = 14\)  \(4 + 7 = 11\)  \(6 + 7 = 13\)

\[50 + 90 = 140\]  \[40 + 70 = 110\]  \[60 + 70 = 130\]

Solve the word problem. Rewrite the 100 or make a drawing. Add to check your work.

2. Savanna had 100 pennies in a jar. She spent some of them. She has 27 in the jar now. How many pennies did she spend?

\(\boxed{73}\) pennies

Draw hands on each clock to show the time.

3. [Clock Image]
4. [Clock Image]
5. [Clock Image]
6. [Clock Image]

\[5:10\] \[2:50\] \[10:25\] \[7:45\]

7. Stretch Your Thinking Without counting, how can you tell which item has the most on a picture graph?

Answers will vary. Possible answer: Find the row that has pictures furthest to the right.
Read the picture graph.
Write the number. Ring *more* or *fewer*.

### Number of Goldfish

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mina</td>
<td>![goldfish]</td>
</tr>
<tr>
<td>Emily</td>
<td>![goldfish]</td>
</tr>
<tr>
<td>Raj</td>
<td>![goldfish]</td>
</tr>
</tbody>
</table>

1. Mina has 3 *more* *fewer* goldfish than Emily.

2. Raj needs 2 *more* *fewer* fish to have as many as Emily has.

Solve.

### Number of Bells

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dan</td>
<td>![bells]</td>
</tr>
<tr>
<td>Tani</td>
<td>![bells]</td>
</tr>
<tr>
<td>Loren</td>
<td>![bells]</td>
</tr>
</tbody>
</table>

3. How many bells do the children have altogether?

   17 bells

   label

4. Dan has 6 red bells. The rest are yellow. How many of Dan’s bells are yellow?

   2 bells

   label
Add in any order. Write the total.

1. \(1 + 5 + 9 = \boxed{15}\)  
2. \(6 + 6 + 5 = \boxed{17}\)

3. \(2 + 4 + 3 + 3 = \boxed{12}\)  
4. \(3 + 8 + 5 + 7 = \boxed{23}\)

Use the picture graph to answer the questions.

5. Who has the most pens? \underline{Sophia}\n
6. Who has the fewest pens? \underline{Jeremy}\n
7. How many more pens does Sophia have than David? \underline{2 more pens}\n
8. Stretch Your Thinking  Without counting all of the pens, explain how you can find how many fewer pens Jeremy has than David.   
   Answers will vary. Possible answer: I will only count from the end of David’s row back until I get to where Jeremy’s row ends. So, Jeremy has 3 fewer pens.
1. The park has 9 oak trees, 2 maple trees, and 6 elm trees in it. Complete the data table.

<table>
<thead>
<tr>
<th>Trees in the Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oak</td>
</tr>
<tr>
<td>Maple</td>
</tr>
<tr>
<td>Elm</td>
</tr>
</tbody>
</table>

2. Use the data table to complete the bar graph.

Use your bar graph. Write the number and ring *more* or *fewer*.

3. There are 7 *more* fewer oak trees than maple trees in the park.

4. There are 4 *more* fewer maple trees than elm trees in the park.

5. We need to plant 3 *more* fewer elm trees to have as many elm trees as oak trees.
Add.

1. \(20 + 40 = \underline{60}\)  
   \(10 + 90 = \underline{100}\)  
   \(50 + 30 = \underline{80}\)

2. \(2 + 4 = \underline{6}\)  
   \(1 + 9 = \underline{10}\)  
   \(5 + 3 = \underline{8}\)

Read the picture graph.
Write the number. Ring *more* or *fewer*.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ellen</td>
<td></td>
</tr>
<tr>
<td>Brad</td>
<td></td>
</tr>
<tr>
<td>Yoko</td>
<td></td>
</tr>
</tbody>
</table>

2. Brad has \(\boxed{2}\) **more**/**fewer** crayons than Yoko.

3. Ellen needs \(\boxed{3}\) **more**/**fewer** crayons to have as many crayons as Brad.

4. Five of Yoko’s crayons are new. The rest of her crayons are old. How many are old?

\(\boxed{4}\) crayons

5. **Stretch Your Thinking** Explain how a bar graph and a picture graph are alike.

*Answers will vary. Possible answer: Both graphs show pictures or bars in rows or columns. You can see how to compare numbers in both graphs by looking at the rows or columns.*
Nineteen children each play a musical instrument.

Use the bar graph to complete the sentences.

1. Two fewer children play the _drums_ than the guitar.

2. Nine children play the _guitar_ or the _violin_.

3. 4 more children have to play the guitar to have the same number as the children who play the piano.

4. 3 fewer children play the violin than play the piano.

5. 10 children play the piano or the drums.

6. 17 children play the piano, the guitar, or the violin.
Solve. Make a proof drawing.

1. Megan bakes 57 biscuits. Each bag holds 10 biscuits. How many bags will be full? How many biscuits will be left over?

<table>
<thead>
<tr>
<th>bags</th>
<th>biscuits left over</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

Estimate and then measure each side. Then find the distance around the triangle.

2. a. Complete the table.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Estimates</td>
<td>3 cm</td>
</tr>
<tr>
<td>BC</td>
<td>may</td>
<td>5 cm</td>
</tr>
<tr>
<td>CA</td>
<td>vary.</td>
<td>5 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.

\[3 \text{ cm} + 5 \text{ cm} + 5 \text{ cm} = 13 \text{ cm}\]

3. Nathan has 6 cars, 4 trucks, and 8 buses in his toy garage. Complete the table to show this.

<table>
<thead>
<tr>
<th>Nathan’s Garage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars</td>
</tr>
<tr>
<td>Trucks</td>
</tr>
<tr>
<td>Buses</td>
</tr>
</tbody>
</table>

4. Stretch Your Thinking  Look at the completed table in Exercise 3. Explain how the bars would look if the information were in a bar graph.

   Possible answer: The bar showing cars would go to the number 6, the bar showing trucks would be the shortest and go to the number 4, and the bar showing buses would go to the number 8. That would be the longest bar.
Use the bar graph to answer the questions below. Fill in the circle next to the correct answer.

1. How many more cans of tuna are there than jars of salsa?
   - 4
   - 5
   - 6
   - 7

2. Altogether, how many apples and granola bars do I have?
   - 11
   - 13
   - 15
   - 16

3. I eat some apples. Now there are only 4 apples left. How many apples did I eat?
   - 0
   - 1
   - 2
   - 4

4. Write Your Own Write 1 question about the graph. Answer your question.

   Check children’s work.
Write $<, >$, or $=$.

1. $164 > 146$
2. $79 = 79$
3. $88 < 123$
4. $125 > 124$

Use the bar graph to complete the sentences.

5. Three fewer children have ___ birds ___ than fish.
6. Thirteen children have ___ dogs ___ or ___ fish ___.
7. __4__ more children need to have cats to have the same number as the children who have dogs.

8. **Stretch Your Thinking** Look at the bar graph.
   Name three ways that the information could change so that there would be the same number of birds and cats.

   *Answers will vary. Possible answer: If there were 4 fewer cats, 4 more birds, 2 fewer cats and 2 more birds.*
1. Prince won 8 medals at the dog show.  
   Lady won 5 medals. Muffy won 3 medals. 
   Make a table to show this.

   **Medals Won at the Dog Show**
   
<table>
<thead>
<tr>
<th>Dog</th>
<th>Medals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prince</td>
<td>8</td>
</tr>
<tr>
<td>Lady</td>
<td>5</td>
</tr>
<tr>
<td>Muffy</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Use the information in the table to make a picture graph. Use a circle for each medal.

   **Medals Won at the Dog Show**
   
   Prince: ⬜️⬜️⬜️⬜️⬜️⬜️⬜️⬜️
   Lady: ⬜️⬜️⬜️⬜️
   Muffy: ⬜️⬜️

3. Use the information in the table to make a bar graph.

   **Medals Won at the Dog Show**
   
   Prince: 🔴🔴🔴🔴🔴🔴🔴🔴🔴
   Lady: 🔴🔴🔴🔴🔴🔴🔴🔴
   Muffy: 🔴🔴🔴
Subtract using any method.

1. $73 - 42 = 31$

2. $60 - 18 = 42$

Use the bar graph to answer the questions below. Fill in the circle next to the correct answer.

3. How many fewer green markers than pink markers does Eric have?

- $\bigcirc$ 5
- $\bigcirc$ 4
- $\bigcirc$ 3
- $\bigcirc$ 2

4. Eric loses some red markers. Now there are only 6 red markers left. How many red markers did he lose?

- $\bigcirc$ 16
- $\bigcirc$ 9
- $\bigcirc$ 5
- $\bigcirc$ 4

5. Stretch Your Thinking Make a table that shows the following information about trees in a park.

<table>
<thead>
<tr>
<th>Trees in a Park</th>
<th>Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oak</td>
<td>10</td>
</tr>
<tr>
<td>Elm</td>
<td>5</td>
</tr>
<tr>
<td>Maple</td>
<td>7</td>
</tr>
</tbody>
</table>

Tables will vary. Possible table shown.
Use the bar graph to solve the problems.

1. Benita read 4 history books. The rest were science books. How many science books did she read?

   ![Bar Graph]

   

   science books

2. Marcus read 3 fewer books than Gina. How many books did Gina read?

   ![Bar Graph]

   books

3. Diego read 4 more books than Eva. How many books did Eva read?

   ![Bar Graph]

   books

4. How many more books did Marcus and Diego read than Benita and Lin?

   ![Bar Graph]

   more books

5. Ali read 4 more books than Lin and Marcus. How many books did Ali read?

   ![Bar Graph]

   books
Subtract.

1. \[
\begin{array}{ccccccc}
18 & 14 & 10 & 15 & 16 & 11 \\
-9 & -8 & -3 & -9 & -7 & -5 \\
\hline
9 & 6 & 7 & 6 & 9 & 6 \\
\end{array}
\]

2. Zoe makes a bracelet with 4 square beads, 1 oval bead, and 9 heart beads. Make a table to show this.

Beads on Zoe’s Bracelet

<table>
<thead>
<tr>
<th>Beads</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Square</td>
<td>4</td>
</tr>
<tr>
<td>Oval</td>
<td>1</td>
</tr>
<tr>
<td>Heart</td>
<td>9</td>
</tr>
</tbody>
</table>

3. Use the information in the table to make a picture graph. Use a circle for each bead.

4. Stretch Your Thinking Tell something the graph shows.
   Possible answer: Most of Zoe’s beads are heart beads.
Ms. Morgan asked the children in her class which of these pets they liked best.

**Which Is Your Favorite Pet?**

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dog</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cat</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bird</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Use the information in the table to make a bar graph.

**Title:** Which Is Your Favorite Pet?

2. Think about your favorite pet. How would the graph change if you added your own answer to the question?

*Children should tell which bar will be 1 unit longer.*
Write how to count the money.

1. Use the bar graph to solve the problems.

2. Five of Sara’s crayons are new. The rest are old. How many crayons are old?

   5 old crayons

3. Alexa has 3 more crayons than Luke. How many crayons does Alexa have?

   9 crayons

4. Stretch Your Thinking Look at the bar graph. Explain what could change so that everyone has the same number of crayons.

   Possible answer: Sara could give 2 crayons to Luke so they would each have 8 crayons.
Count the hundreds, tens, and ones.
Write the totals.

1. [ | | | | | | | | ]

   | 1 | 9 | 8 |
   | Hundreds | Tens | Ones |
   | Total 198 |

2. [ | | | | | | | | ]

   | 4 | 5 | 9 |
   | Hundreds | Tens | Ones |
   | Total 459 |

Draw to show the numbers. Use boxes, sticks, and circles.

3. 2 4 3

   [ | | | | ]

4. 4 6 8

   [ | | | | | | ]

5. 3 8 2

   [ | | | | | ]

6. 1 7 7

   [ | | | | | ]
Add.

1. \[43 + 28 = 71\]
2. \[65 + 17 = 82\]
3. \[35 + 28 = 63\]
4. \[52 + 38 = 90\]
5. \[47 + 29 = 76\]

Write <, >, or =.

6. \[153 < 181\]
7. \[113 < 131\]
8. \[56 < 104\]
9. \[59 = 59\]
10. \[84 > 48\]
11. \[151 > 139\]

12. Write how to count the money.

25¢ 50¢ 75¢ 80¢ 85¢ 90¢ 91¢ 92¢

13. Stretch Your Thinking You have base ten blocks for 2 hundreds, 2 tens, and 2 ones. Write all of the different 3-digit numbers you could show.

100, 101, 102, 110, 111, 112, 120, 121, 122, 200, 201, 202, 210, 211, 212, 220, 221, 222
Write the hundreds, tens, and ones.

1. \(675 = \underline{600} + \underline{70} + \underline{5}\)

2. \(519 = \underline{500} + \underline{10} + \underline{9}\)

3. \(831 = \underline{800} + \underline{30} + \underline{1}\)

4. \(487 = \underline{400} + \underline{80} + \underline{7}\)

5. \(222 = \underline{200} + \underline{20} + \underline{2}\)

6. \(765 = \underline{700} + \underline{60} + \underline{5}\)

Write the number.

7. \(300 + 40 + 6 = \underline{346}\)

8. \(100 + 60 = \underline{160}\)

9. \(700 + \underline{4} = \underline{704}\)

10. \(200 + 50 + 3 = \underline{253}\)

11. \(400 + 70 + 1 = \underline{471}\)

12. \(800 + 80 + 8 = \underline{888}\)

Write the number that makes the equation true.

13. \(\underline{435} = 30 + 5 + 400\)

14. \(2 + 80 + 600 = \underline{682}\)

15. \(\underline{860} = 60 + 800\)

16. \(900 + 7 + 40 = \underline{947}\)

17. \(\underline{354} = 300 + 4 + 50\)

18. \(1 + 500 = \underline{501}\)

19. \(729 = 20 + 9 + \underline{700}\)

20. \(\underline{90} + 6 + 200 = 296\)
Add in any order. Write the total.

1. \(8 + 1 + 4 = 13\)
2. \(6 + 9 + 5 = 20\)
3. \(7 + 4 + 3 = 14\)
4. \(8 + 3 + 2 = 13\)

Draw a Math Mountain to solve the word problem. Show how you add or subtract.

5. There are 23 girls and 49 boys standing in line. How many children are standing in line?

\[
\begin{array}{c}
23 \\
49 \\
72
\end{array}
\]

6. Count the hundreds, tens, and ones. Write the total.

\[
\begin{array}{ccc}
\_ & \underline{\_} & \underline{\_
} \end{array}
\]

Hundreds: 2
Tens: 6
Ones: 9
Total: 269

7. Stretch Your Thinking  Write an addition equation. The equation must have a 1-, a 2-, and a 3-digit addend and use all of these digits.

\[
6 \ 6 \ 2 \ 2 \ 8 \ 8 \ 0 \ 0 \ 0
\]

Possible answers: \(6 + 20 + 800 = 826\), \(8 + 20 + 600 = 628\), \(2 + 80 + 600 = 682\)
Write $<$, $>$, or $=$.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>285 $&lt;$ 385</td>
</tr>
<tr>
<td>3.</td>
<td>961 $&gt;$ 691</td>
</tr>
<tr>
<td>5.</td>
<td>754 $&lt;$ 861</td>
</tr>
<tr>
<td>7.</td>
<td>367 $&gt;$ 67</td>
</tr>
<tr>
<td>9.</td>
<td>158 $&lt;$ 159</td>
</tr>
<tr>
<td>11.</td>
<td>222 $&lt;$ 333</td>
</tr>
<tr>
<td>13.</td>
<td>604 $=$ 604</td>
</tr>
<tr>
<td>15.</td>
<td>288 $&lt;$ 386</td>
</tr>
<tr>
<td>17.</td>
<td>648 $&lt;$ 734</td>
</tr>
<tr>
<td>19.</td>
<td>762 $&gt;$ 643</td>
</tr>
<tr>
<td>21.</td>
<td>691 $&lt;$ 961</td>
</tr>
</tbody>
</table>
Remembering

Be the helper. Is the answer OK? Write yes or no. If no, fix the mistakes and write the correct answer.

1. \( \begin{array}{c}
28 \\
+ 34 \\
\hline
62
\end{array} \) \( \text{OK?} \) Yes

2. \( \begin{array}{c}
58 \\
+ 17 \\
\hline
75
\end{array} \) \( \text{OK?} \) No

3. \( \begin{array}{c}
45 \\
+ 26 \\
\hline
71
\end{array} \) \( \text{OK?} \) No

Add up to solve the word problem.

4. Allison has 67 beads. She uses some beads to make a necklace. Now she has 39 beads. How many beads did Allison use for her necklace?

\[ \text{28 beads} \]

Write the number.

5. \( 400 + 10 + 5 = 415 \)

6. \( 800 + 7 = 807 \)

7. Stretch Your Thinking Use the digits to write pairs of 3-digit numbers. Write \( < \), \( > \), or \( = \) to compare the pairs of numbers you write.

Possible answers:

\[ \begin{array}{c}
672 \ \text{>} \ 130 \\
207 \ \text{<} \ 316 \\
720 \ \text{>} \ 613 \\
120 \ \text{<} \ 736
\end{array} \]
Count by ones. Write the numbers.

1. 396 397 398 399 400 401 402 403 404
2. 695 696 697 698 699 700 701 702 703
3. 498 499 500 501 502 503 504 505 506
4. 894 895 896 897 898 899 900 901 902
5. 796 797 798 799 800 801 802 803 804

Count by tens. Write the numbers.

6. 830 840 850 860 870 880 890 900 910
7. 470 480 490 500 510 520 530 540 550
8. 740 750 760 770 780 790 800 810 820
9. 380 390 400 410 420 430 440 450 460
10. 560 570 580 590 600 610 620 630 640

Write the number name.

11. 597 five hundred ninety-seven
12. 640 six hundred forty
Find the total or partner.

1. \[ \begin{array}{ccccccc}
4 & + & 8 & = & 12 \\
9 & + & 6 & = & 15 \\
7 & + & 5 & = & 12 \\
13 & - & 7 & = & 6 \\
16 & - & 9 & = & 7 \\
18 & - & 9 & = & 9 
\end{array} \]

Solve the word problem.

2. Cameron reads 57 pages on Monday and 85 pages on Tuesday. How many pages does he read in all?

\[ 142 \text{ pages} \]

Write <, >, or =.

3. \[ 675 \, \bigcirc \, 657 \]
4. \[ 198 \, \bigcirc \, 201 \]
5. \[ 86 \, \bigcirc \, 124 \]
6. \[ 36 = 36 \]

7. **Stretch Your Thinking** Natalie practices the piano every day. On Monday she practiced for 10 minutes. If she practices every day for 10 minutes, on which day of the week will she have practiced for 90 minutes? Explain.

Tuesday; I counted by tens for 9 days. I started on Monday and said the days of the week in order.
Solve each word problem.

1. Maria blows up some balloons for a party. She divides them into 4 groups of one hundred and 7 groups of ten. There are 6 balloons left over. How many balloons does Maria blow up for the party?

2. Roger has 5 erasers. He buys 6 packages of one hundred and 2 packages of ten. How many erasers does Roger have altogether?

3. Add.

\[
\begin{align*}
400 + 200 &= 600 \\
440 + 7 &= 447 \\
16 + 700 &= 716 \\
40 + 50 &= 90 \\
84 + 10 &= 94 \\
70 + 7 &= 77 \\
8 + 460 &= 468 \\
200 + 9 &= 209 \\
53 + 500 &= 553 \\
30 + 10 &= 40 \\
60 + 40 &= 100 \\
60 + 4 &= 64 \\
380 + 10 &= 390 \\
900 + 80 &= 980 \\
800 + 200 &= 1,000
\end{align*}
\]
Look for shapes around you.

1. List or draw objects that show rectangles.

   Answers or drawings will vary.
   Possible answers: notebook, computer screen, placemat, picture frame

Solve the word problem. Draw a proof drawing if you need to.

2. There are 200 people with tickets for the Fall Festival. A worker collects tickets from 62 of the people. How many tickets are still left to collect?

   \[ \begin{array}{c}
   138 \\
   \text{tickets} \\
   \text{label}
   \end{array} \]

Count by tens. Write the numbers.

3. \[650 \ 660 \ 670 \ 680 \ 690 \ 700 \ 710 \ 720 \ 730\]

4. **Stretch Your Thinking** Brian has some boxes of paper clips. Some boxes hold 10 clips and some boxes hold 100. He has some paper clips left over. He has three more boxes with 100 paper clips than he has boxes with 10 paper clips. He has two fewer paper clips left over than he has numbers of boxes with 100 paper clips. What number of paper clips could he have?

   Some possible answers: 412, 523, 967
Solve each word problem.

1. Martin sells 58 tickets to the roller coaster ride. He sells 267 tickets to the boat ride. How many tickets does Martin sell altogether?

2. Justine jumps 485 times on a pogo stick. Then she jumps 329 times when she tries again. How many times does she jump altogether?

3. \[18 + 549 = 567\]

4. \[190 + 89 = 279\]

5. \[76 + 570 = 646\]

6. \[75 + 656 = 731\]

7. \[348 + 162 = 510\]

8. \[407 + 394 = 801\]
Add. Use any method.

1. \[\begin{array}{c}
53 \\
+ 39 \\
\hline
92
\end{array}\]
2. \[\begin{array}{c}
45 \\
+ 86 \\
\hline
131
\end{array}\]
3. \[\begin{array}{c}
75 \\
+ 68 \\
\hline
143
\end{array}\]

Label the shapes using the words in the box.

- cube
- quadrilateral
- pentagon
- hexagon

4. [Quadrilateral] 5. [Pentagon]

Add.

6. \[300 + 70 = \boxed{370}\]
7. \[20 + 40 = \boxed{60}\]
8. \[8 + 650 = \boxed{658}\]

7. **Stretch Your Thinking** Add a 3-digit number and a 2-digit number. Use the digits 5, 6, 7, and 8 to write the addition exercise. You can use a digit more than once. Find the sum.

Possible answer: \[867 + 57 = 924\]
Add. Use any method.

1. \[ 459 + 267 = 726 \]
   - Make a new ten? Yes
   - Make a new hundred? Yes
   - Make a new thousand? No

2. \[ 187 + 374 = 561 \]
   - Make a new ten? Yes
   - Make a new hundred? Yes
   - Make a new thousand? No

3. \[ 678 + 15 = 693 \]
   - Make a new ten? Yes
   - Make a new hundred? No
   - Make a new thousand? No

4. \[ 635 + 92 = 727 \]
   - Make a new ten? No
   - Make a new hundred? Yes
   - Make a new thousand? No

5. \[ 390 + 610 = 1,000 \]
   - Make a new ten? No
   - Make a new hundred? Yes
   - Make a new thousand? Yes

6. \[ 64 + 936 = 1,000 \]
   - Make a new ten? Yes
   - Make a new hundred? Yes
   - Make a new thousand? Yes
Measure each vertical line segment below by marking and counting 1-cm lengths.

1. [segment with 6 cm label]
2. [segment with 3 cm label]
3. [segment with 4 cm label]

Solve the word problem.

4. A man sells 275 circus tickets on Monday morning and 369 circus tickets on Monday afternoon. How many tickets does he sell on Monday?

644 tickets

5. Stretch Your Thinking  Write an addition exercise with a sum of 1,000. Use two 3-digit addends. Choose addends so that you will need to make a new ten, a new hundred, and a new thousand when you add.

Many answers are possible. Possible answer:

715 + 285 = 1,000
Solve each word problem.

1. Angie has 648 stickers. 254 of the stickers are cat stickers. The rest are dog stickers. How many dog stickers does Angie have?

   394 dog stickers

   label

2. Billy has 315 coins. 209 of the coins are silver in color. How many coins are not silver in color?

   106 coins

   label

3. Noah is going to plant 752 seeds. Some of the seeds are flower seeds. 547 of the seeds are vegetable seeds. How many flower seeds will Noah plant?

   205 flower seeds

   label

4. Heather’s dad is reading a book that is 564 pages long. So far he has read 286 pages. How many pages does he have left to read?

   278 pages

   label
Make a ten to find the total.

1. \(7 + 6 = 13\)  
2. \(8 + 7 = 15\)  
3. \(8 + 9 = 17\)

Write the time in two different ways.

4. [Image of a clock showing 5 o’clock]  
5. [Image of a clock showing 8 o’clock]  
6. [Image of a clock showing 10 o’clock]

   [Image of a digital clock showing 5:00]  
   [Image of a digital clock showing 8:00]  
   [Image of a digital clock showing 10:00]

Add. Use any method.

7. \[
\begin{array}{c}
357 \\
+ 585 \\
\hline
942
\end{array}
\]

   Make a new ten?  
   Make a new hundred?  
   Make a new thousand?  
   Yes  
   Yes  
   No

8. \(249 + 751 = 1,000\)

   Make a new ten?  
   Make a new hundred?  
   Make a new thousand?  
   Yes  
   Yes  
   Yes

9. **Stretch Your Thinking** Explain how to solve for an unknown addend.

   Use the Adding Up method. Add to the next ten and hundred, then add to the known sum. The amount that was added up is the unknown addend.
Solve the word problems. Use your favorite method. Make a proof drawing.

1. Ricardo likes olives. He has 100 olives. He eats 43 of them. How many olives does he have left?

   57 olives

2. Dawn has 1,000 pennies in her penny jar. She gives some to her sister. Now she has 432 left. How many pennies does Dawn give to her sister?

   568 pennies

3. Tory sells hockey sticks to teams in her city. She has 500 and sells 353. How many hockey sticks does she have left to sell?

   147 hockey sticks

4. Randy collects magnets. Over two years he collects 400 magnets. He collects 125 magnets the first year. How many does he collect the second year?

   275 magnets
Add.

1. \(5 + 6 = 11\)  
2. \(7 + 9 = 16\)  
3. \(100 + 35 = 135\)  
4. \(50 + 60 = 110\)  
5. \(70 + 90 = 160\)  
6. \(10 + 35 = 45\)  
7. \(1 + 35 = 36\)

Draw hands on each clock to show the time.

2. \[\text{Clock showing } 4:10\]
3. \[\text{Clock showing } 1:30\]
4. \[\text{Clock showing } 7:15\]
5. \[\text{Clock showing } 10:45\]

Solve the word problem.

6. The school has 537 children. 359 of the children had lunch. How many children still need to have lunch?

\[178 \text{ children}\]

7. **Stretch Your Thinking** How is subtracting from a 3-digit number different from subtracting from a 2-digit number?

Possible answer: When you subtract from a 3-digit number you can ungroup hundreds and tens. When you subtract from a 2-digit number you can only ungroup tens.
Decide if you need to ungroup. If you need to ungroup, draw a magnifying glass around the top number. Then find the answer. Children’s ungroupings may vary.

1. \[ 730 - 499 = \]
   Ungroup to get 10 ones? **Yes**
   Ungroup to get 10 tens? **Yes**

2. \[ 950 - 639 = \]
   Ungroup to get 10 ones? **Yes**
   Ungroup to get 10 tens? **No**

3. \[ 300 - 167 = \]
   Ungroup to get 10 ones? **Yes**
   Ungroup to get 10 tens? **Yes**

4. \[ 404 - 188 = \]
   Ungroup to get 10 ones? **Yes**
   Ungroup to get 10 tens? **Yes**

5. \[ 502 - 149 = 353 \]
   Ungroup to get 10 ones? **Yes**
   Ungroup to get 10 tens? **Yes**

UNIT 6 LESSON 10 Subtract from Numbers with Zeros 175
Use the picture graph to answer the questions.

<table>
<thead>
<tr>
<th>Crayons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paige</td>
</tr>
<tr>
<td>Tawana</td>
</tr>
<tr>
<td>Colin</td>
</tr>
</tbody>
</table>

1. Who has the most crayons? ______ Paige ______
2. Who has the fewest crayons? ______ Tawana ______
3. How many crayons do they all have together?
   16 crayons

Solve the word problem. Use your favorite method. Make a proof drawing.

4. There are 500 craft sticks in the box.
   The art class uses 386 of the craft sticks.
   How many craft sticks are left?
   114 craft sticks

5. **Stretch Your Thinking** When you are subtracting from a 3-digit number, how do you know if you will need to regroup?
   If there are more tens or ones in the number you are subtracting than there are in the number you are subtracting from, then you will need to regroup.
Decide if you need to ungroup. If you need to ungroup, draw a magnifying glass around the top number. Then find the answer. Children’s ungroupings may vary.

1. \[ \begin{array}{c}
4 \boxed{12} \\
3 \boxed{2} \\
1 \\
\hline
5 \boxed{3} \\
\end{array} 
- \begin{array}{c}
4 \boxed{3} \\
3 \\
4 \\
\hline
\end{array} 
\]

Ungroup to get 10 ones? \underline{Yes} 
Ungroup to get 10 tens? \underline{Yes} 

2. \[ \begin{array}{c}
4 \boxed{17} \\
2 \boxed{9} \\
6 \\
\hline
5 \boxed{7} \\
9 \\
\hline
2 \boxed{8} \\
3 
\end{array} 
\]

Ungroup to get 10 ones? \underline{Yes} 
Ungroup to get 10 tens? \underline{Yes} 

3. \[ \begin{array}{c}
3 \boxed{9} \\
8 \\
1 \\
\hline
\end{array} 
- \begin{array}{c}
2 \boxed{6} \\
5 \\
\hline
\end{array} 
\]

Ungroup to get 10 ones? \underline{Yes} 
Ungroup to get 10 tens? \underline{No} 

4. \(238 - 177 = \underline{61}\)

5. Latoya’s class picks 572 apples on a field trip. They bring 386 apples home with them. How many apples do they leave?

\[ \boxed{186} \text{ apples} \]

6. Elena had 735 stickers. She gives 427 stickers to her brother. How many stickers does she have left?

\[ \boxed{308} \text{ stickers} \]
Subtract.

1. \[61 - 25 = 36\]
2. \[85 - 34 = 51\]
3. \[93 - 24 = 69\]
4. \[52 - 23 = 29\]
5. \[91 - 54 = 37\]

Read the picture graph.
Write the number. Ring more or fewer.

<table>
<thead>
<tr>
<th>Number of Marbles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ling</td>
</tr>
<tr>
<td>Sean</td>
</tr>
<tr>
<td>Maya</td>
</tr>
</tbody>
</table>

6. Sean has \(\boxed{5}\) more fewer marbles than Ling.

7. Maya needs \(\boxed{3}\) more fewer marbles to have as many marbles as Sean.

Decide if you need to ungroup. If you need to ungroup, draw a magnifying glass around the top number. Then find the answer. Children’s ungrouping may vary.

8. \[863 - 245 = 618\]
   Ungroup to get 10 ones? \(\text{Yes}\)
   Ungroup to get 10 tens? \(\text{No}\)

9. Stretch Your Thinking Write and solve a subtraction exercise in which you need to ungroup two times. \(\text{Answers will vary}\).
Decide if you need to ungroup. If you need to ungroup, draw a magnifying glass around the top number. Then find the answer. *Children’s ungroupings may vary.*

1. \[ \begin{array}{c}
630 \\
-318 \\
\hline
312
\end{array} \]

Ungroup to get 10 ones? **Yes**
Ungroup to get 10 tens? **No**

2. \[ \begin{array}{c}
8211 \\
-845 \\
\hline
86
\end{array} \]

Ungroup to get 10 ones? **Yes**
Ungroup to get 10 tens? **Yes**

3. \[ \begin{array}{c}
407 \\
-274 \\
\hline
133
\end{array} \]

Ungroup to get 10 ones? **No**
Ungroup to get 10 tens? **Yes**

4. \[ \begin{array}{c}
498 \\
-276 \\
\hline
222
\end{array} \]

Ungroup to get 10 ones? **No**
Ungroup to get 10 tens? **No**

5. Jamal has 590 craft sticks. He uses 413 craft sticks to make a building. How many craft sticks does he have left?

6. On Saturday, 290 people go to the roller skating rink. 184 of them are adults. How many are children?

590 - 413 = 177 craft sticks

290 - 184 = 106 children
Under each picture, write the total amount of money so far. Then write the total using $.

1.  

Make a drawing. Write an equation. Solve.

2. Jiao has some beads. Then she buys 35 more beads. Now she has 73 beads. How many beads did Jiao start with?

3. Decide if you need to ungroup. If you need to ungroup, draw a magnifying glass around the top number. Then find the answer. Children’s ungrouping may vary.

4. Stretch Your Thinking What 3-digit number would need no ungrouping to subtract from? Explain. 999; there are no digits greater than 9 to make you need to ungroup.
Decide if you need to add or subtract. Use the opposite operation to check your answer.

1. $184 + 433 = 617$

2. $552 - 433 = 153$

3. $328 - 119 = 209$

4. $288 + 294 = 582$

5. $967 - 548 = 419$

6. $474 - 355 = 119$
Use the bar graph to complete the sentences.

Sports Children Play

Baseball  Soccer  Football  Basketball

0 1 2 3 4 5 6 7 8 9 10

1. Four fewer children play ____football____ than soccer.

2. Eleven children play ____baseball____ or ____basketball____.

Decide if you need to ungroup. If you need to ungroup, draw a magnifying glass around the top number. Then find the answer. Children’s ungrouping may vary.

3. \[\begin{array}{c}
3 & 1 & 1 \\
4 & 2 & 7 \\
\hline
1 & 5 & 9 \\
\hline
2 & 6 & 8
\end{array}\]

- Ungroup to get 10 ones?  Yes
- Ungroup to get 10 tens?  Yes

4. Stretch Your Thinking  Explain why you can check subtraction by adding.

Possible answer: When you subtract, you take away one addend (partner) from the total to get the other addend (partner). So, when you add the addends (partners) together, you should get the total.
Solve each word problem.

1. Mario buys 98 plastic cups. He gives 29 to the art teacher. How many cups does he have left?

   69  cups

2. Joel collects baseball cards. He has 568 cards. Then he buys 329 more at a yard sale. How many cards does he have now?

   897  cards

3. A bird collects 392 sticks to build a nest. Then the bird collects 165 more. How many sticks does the bird collect?

   557  sticks

4. There are 765 books in the school library. 259 are paperback, and the rest are hardcover. How many hardcover books are there in the school library?

   506  hardcover books
Remembering

Make a drawing. Write an equation. Solve the problem. Drawings and equations may vary.

1. There are some children in the class.
   8 are girls and 9 are boys. How many children are in the class?
   17 children

Estimate and then measure each side.
Then find the distance around the triangle.

2. a. Complete the table.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Estimates</td>
<td>2 cm</td>
</tr>
<tr>
<td>BC</td>
<td>may</td>
<td>2 cm</td>
</tr>
<tr>
<td>CA</td>
<td>vary.</td>
<td>2 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.

   \[ \text{2 cm} + \text{2 cm} + \text{2 cm} = \text{6 cm} \]

Decide if you need to add or subtract. Use the opposite operation to check your answer.

3. \[ \begin{array}{c}
   683 \\
   - 145 \\
   \hline
   538
 \end{array} \]

4. \[ \begin{array}{c}
   538 \\
   + 145 \\
   \hline
   683
 \end{array} \]

5. Stretch Your Thinking
   Write and solve a subtraction word problem with an answer greater than 500 pennies.
   Possible answer: Lee has 831 pennies in her jar. She spends 269 of those pennies. How many pennies are left? 562 pennies
The table shows the number of children who take part in different after school activities.

Use the table to solve the word problems.

### After School Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Club</td>
<td>378</td>
</tr>
<tr>
<td>Music Lessons</td>
<td>205</td>
</tr>
<tr>
<td>Sports</td>
<td>204</td>
</tr>
<tr>
<td>Dance Class</td>
<td>105</td>
</tr>
<tr>
<td>Science Club</td>
<td>217</td>
</tr>
</tbody>
</table>

1. One hundred seventeen girls take music lessons after school. How many boys take music lessons?

   \[
   \text{88} \quad \text{boys}
   \]

   label

2. How many fewer children signed up for music and dance than signed up for the art club?

   \[
   \text{68} \quad \text{fewer children}
   \]

   label

3. Write a word problem using data from the table. Solve the problem.

   Children’s word problems will vary.
Estimate and then measure each side. Then find the distance around the rectangle.

I. \[ \begin{align*} \text{AB} & \quad \text{4 cm} \\ \text{BC} & \quad 4 \text{ cm} \\ \text{CD} & \quad 2 \text{ cm} \\ \text{DA} & \quad 2 \text{ cm} \end{align*} \]

a. Complete the table.

<table>
<thead>
<tr>
<th>Side</th>
<th>Estimate</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>Estimates</td>
<td>4 cm</td>
</tr>
<tr>
<td>BC</td>
<td>may</td>
<td>2 cm</td>
</tr>
<tr>
<td>CD</td>
<td>vary.</td>
<td>4 cm</td>
</tr>
<tr>
<td>DA</td>
<td></td>
<td>2 cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the rectangle.

\[ \begin{align*} 4 \text{ cm} + 2 \text{ cm} + 4 \text{ cm} + 2 \text{ cm} &= 12 \text{ cm} \end{align*} \]

Solve the word problem.

2. The store has 374 CDs. A box with 258 CDs arrives at the store. How many CDs does the store have now?

\[ \begin{align*} & \quad \text{632 CDs} \\ & \quad \text{label} \end{align*} \]

3. Stretch Your Thinking Fill in the digits to complete the addition exercise.

\[ \begin{align*} & \quad \begin{array}{c} 1 \quad 8 \quad 4 \\ + \quad \begin{array}{c} 2 \quad 6 \quad 7 \end{array} \end{array} \\ \hline & \quad \begin{array}{c} 4 \quad 5 \quad 1 \end{array} \end{align*} \]
Write how many in each row and in each column. Then write two equations for each array.

1.  

   \[
   \begin{array}{cccccc}
   \bigcirc & \bigcirc & \bigcirc & \bigcirc & \bigcirc & 4 \\
   \bigcirc & \bigcirc & \bigcirc & \bigcirc & \bigcirc & 4 \\
   \bigcirc & \bigcirc & \bigcirc & \bigcirc & \bigcirc & 4 \\
   \bigcirc & \bigcirc & \bigcirc & \bigcirc & \bigcirc & 4 \\
   \bigcirc & \bigcirc & \bigcirc & \bigcirc & \bigcirc & 4 \\
   \end{array}
   \]

   \[5 + 5 + 5 + 5 = 20\]

   \[4 + 4 + 4 + 4 + 4 = 20\]

2.  

   \[
   \begin{array}{cccc}
   \triangle & \triangle & 2 \\
   \triangle & \triangle & 2 \\
   \triangle & \triangle & 2 \\
   \end{array}
   \]

   \[2 + 2 + 2 = 6\]

   \[3 + 3 = 6\]

Measure in centimeters. Draw rows and columns. Write the number of small squares.

3.  

   \[
   \begin{array}{cccc}
   | & | & | & | \\
   | & | & | & | \\
   \end{array}
   \]

   \[8 \text{ squares}\]

4.  

   \[
   \begin{array}{cccc}
   | & | & | & | \\
   | & | & | & | \\
   \end{array}
   \]

   \[12 \text{ squares}\]

5.  

   \[
   \begin{array}{cc}
   | & | \\
   \end{array}
   \]

   \[4 \text{ squares}\]
Make a matching drawing or draw comparison bars. Solve the problem.

1. Al has 8 grapes. Erin has 6 more grapes than Al. How many grapes does Erin have?

   [Diagram: Al: 8 grapes, Erin: ? grapes]

   \[8 + 6 = 14\]

Read the picture graph. Write the number. Ring more or fewer.

<table>
<thead>
<tr>
<th>Number of Books</th>
</tr>
</thead>
<tbody>
<tr>
<td>David</td>
</tr>
<tr>
<td>Tiffany</td>
</tr>
<tr>
<td>Pedro</td>
</tr>
</tbody>
</table>

2. Tiffany has 7 more fewer books than David.

3. Pedro has 4 more fewer books than Tiffany.

Count by tens. Write the numbers.

4. 650 660 670 680 690 700 710 720 730

5. Stretch Your Thinking Draw three different arrays that show 12. Drawings will vary. Check children’s work.
1. Make 2 halves. Show different ways.
   Shade half of each rectangle.

   Children may shade either half.

2. Make 3 thirds. Show different ways.
   Shade a third of each rectangle.

   Children may shade any third.

   Shade a fourth of each rectangle.  
   Answers may vary. Possible answers are shown. Children may shade any fourth.

4. Make 2 halves. 
   Shade half of the circle.

   Children may shade any equal share.

5. Make 3 thirds. 
   Shade a third of the circle.

   Shade a fourth of the circle.
Add.

1. \[73 + 19 = 92\]
2. \[53 + 46 = 99\]
3. \[68 + 23 = 91\]
4. \[27 + 35 = 62\]
5. \[46 + 39 = 85\]

Write how many in each row and in each column. Then write two equations for each array.

6. \[3 \times 5 \times 5 \times 5 = 15\]
7. \[4 \times 3 \times 3 \times 3 \times 3 = 12\]

8. **Stretch Your Thinking** Draw a rectangle.
Show 4 fourths that are all the same-size triangles, but not all the same shape.

Possible answer:
Solve.

1. Becky’s garden is 21 meters wide. Jerry’s garden is 17 meters wide. How much wider is Becky’s garden than Jerry’s garden?

   \[ \text{4 meters} \]

2. Hannah’s painting is 39 inches long. She adds 12 inches to it. How long is the painting now?

   \[ \text{51 inches} \]

Use the number line diagram to add or subtract.

3. Loop 28 and 56. Loop the difference \( D \).

   How long is it? \[ \text{28 units} \]

4. Loop 48. Add 15 to it. Loop the total \( T \).

   How long is it? \[ \text{63 units} \]
Add.

1. \(14 + 46 + 62 + 39 = 161\)

2. Count the hundreds, tens, and ones.
   
   Write the total.
   
   \[ \begin{array}{ccc}
   & & \\
   \\
   & & \\
   & & \\
   & & \\
   \\ \\
   \end{array} \]
   
   
   \[\boxed{352}\]
   
   \(3\) Hundreds     \(5\) Tens     \(2\) Ones     Total \(352\)

3. Make 2 halves.

4. Make 3 thirds.

5. Make 4 fourths.

6. **Stretch Your Thinking** Write a subtraction word problem that has the answer 6 feet.

   Possible answer: Sharon’s garden is 17 feet long.

   Ricky’s garden is 11 feet long. How many feet longer is Sharon’s garden than Ricky’s garden?

   6 feet
Solve.

1. Here is the path Fluffy took on her walk today. How many meters did she walk?
   
   $oxed{78}$ meters unit

2. Colin wants to decorate a picture frame with gold ribbon. How long should the ribbon be if he wants to put ribbon around the whole frame?
   
   $oxed{186}$ cm unit

3. Here is a top view drawing of the new sandbox for the park. Each side is 16 feet long. A border runs along the edge. How long is the border?
   
   $oxed{64}$ feet unit
Subtract.

1. \[ \begin{array}{c}
1200 \\
- 41
\end{array} \]
   \[ \begin{array}{c}
159
\end{array} \]

2. \[ \begin{array}{c}
1200 \\
- 55
\end{array} \]
   \[ \begin{array}{c}
145
\end{array} \]

3. \[ \begin{array}{c}
1200 \\
- 87
\end{array} \]
   \[ \begin{array}{c}
113
\end{array} \]

Write the time in two different ways.

4. 1 o’clock
   \[ 1:00 \]

5. 5 o’clock
   \[ 5:00 \]

6. 9 o’clock
   \[ 9:00 \]

Solve.

7. Jen’s paper is 30 cm long. She cuts 12 cm from the bottom of the paper. How long is her paper now?
   \[ 18 \text{ centimeters} \]
   \[ \text{unit} \]

8. Stretch Your Thinking Michael has a triangle-shaped flower bed. The distance around the flower bed is 58 feet. What could be the length of each side?
   Answers will vary. Possible answer: 24 feet, 24 feet, and 10 feet
Represent each equation on the number line diagram. Then find the difference or the total.

1. \(56 + 38 = 94\)

2. \(34 + 47 = 81\)

3. \(38 + 31 = 69\)

4. \(42 + 29 = 71\)
Solve. Rewrite the 100 or make a drawing. Add to check your answer.

1. Brian sees 100 cars in the parking lot. 36 of the cars leave. How many cars are still in the parking lot?

   $64$ cars

2. Mr. Kensey is putting a fence around his garden. How much fencing will he need if he wants to put a fence around the whole garden?

   $142$ feet

3. Stretch Your Thinking What equation is shown by this number line?

   $27 + 52 = 79$
1. Show 2 halves.

2. Show 3 thirds.

3. Show 4 fourths.

Roberto, Niko, and Maya each buy a pizza. All their pizzas are the same size.

- Roberto cuts his pizza into 2 equal parts.
- Niko cuts his pizza into 3 equal parts.
- Maya cuts her pizza into 4 equal parts.

4. Roberto eats 2 halves and Maya eats 4 fourths. Do they eat the same amount? Explain.

Yes. Two halves make one whole pizza and 4 fourths make one whole pizza. They both eat their whole pizza.

5. Is half of Roberto’s pizza greater than, less than, or equal to a third of Maya’s pizza? Explain.

Half of Roberto’s pizza is greater than a third of Maya’s pizza. The fewer pieces there are, the larger each piece is.
Subtract.

1. \[ 73 - 45 = 28 \]
2. \[ 91 - 37 = 54 \]
3. \[ 68 - 34 = 34 \]
4. \[ 83 - 18 = 65 \]
5. \[ 50 - 37 = 13 \]

Estimate and then measure each side.
Then find the distance around the triangle.

6. \[ AB \text{ cm} + BC \text{ cm} + CA \text{ cm} = \text{ cm} \]

Show the equation on the number line diagram.
Then find the difference or the total.

7. \[ 35 + 43 = 78 \]

8. Stretch Your Thinking  Dennis and Tami each make a pizza. Both pizzas are the same size and shape. Dennis eats 4 pieces. Tami eats 2 pieces. Could they each have eaten the same amount? Explain.

Yes. Dennis could have cut his pizza into 4 pieces and Tami could have cut her pizza into 2 pieces. Then they would each eat the same amount.