Count the 1-cm lengths. Write the length.

1. ______ cm

2. ______ cm

3. ______ cm

4. Use your centimeter ruler to draw a line segment 8 cm long. Mark the 1-cm lengths.

Use a centimeter ruler to mark the 1-cm lengths. Write the length.

5. ______ cm

6. ______ cm

7. ______ cm
Make a ten to find the total.

1. \(4 + 7 = \square\)  \(4 + 8 = \square\)  \(9 + 5 = \square\)

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

Draw lines to make pairs. Write odd or even.

3.  

4.  

Add.

5. \(30 + 60 = \square\)  \(50 + 20 = \square\)  \(10 + 90 = \square\)
   \(3 + 6 = \square\)  \(5 + 2 = \square\)  \(1 + 9 = \square\)

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

   __________________________________________________
   __________________________________________________
   __________________________________________________
Look for shapes in your home and neighborhood.

1. List or draw objects that show squares.

2. List or draw objects that show rectangles.

3. List or draw objects that show triangles.

4. List or draw objects that show pentagons.

5. List or draw objects that show hexagons.
Find the unknown addend.

1. \(4 + \Box = 12\)  
   \(8 + \Box = 15\)  
   \(14 - \Box = 9\)

2. \(6 + \Box = 12\)  
   \(5 + \Box = 11\)  
   \(13 - \Box = 7\)

Find the total.

3. \(7 + 4 + 6 + 9 - 8 - 3 = 17\)

What numbers are shown?

4. \(\Box \Box \Box \Box\)  
   \(\Box = \Box + \Box + \Box\)

5. \(\Box \Box \Box \Box \Box \Box \Box \Box \Box \Box \Box \Box \Box\)  
   \(\Box = \Box + \Box + \Box\)

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?
Use a centimeter ruler. Find the distance around each shape.

1

\[ \text{\_\_\_ cm + \_\_\_ cm + \_\_\_ cm + \_\_\_ cm = \_\_\_ cm} \]

2

\[ \text{\_\_\_ cm + \_\_\_ cm + \_\_\_ cm + \_\_\_ cm = \_\_\_ cm} \]

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></td>
<td></td>
</tr>
<tr>
<td>IJ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Find the distance around the rectangle.

\[ \text{\_\_\_ cm + \_\_\_ cm + \_\_\_ cm + \_\_\_ cm = \_\_\_ cm} \]
Write the unknown addend.

1. \(5 + \square = 13\)
2. \(8 + \square = 14\)
3. \(4 + \square = 12\)
4. \(8 + \square = 17\)
5. \(13 - \square = 7\)
6. \(16 - \square = 7\)

Solve. Make a proof drawing.

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?

\[\square\] boxes \[\square\] uniforms left over

Use your centimeter ruler to draw a line segment 7 cm long. Mark and count 1-cm lengths.

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.
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></td>
<td></td>
</tr>
<tr>
<td>$BC$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$CA$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.

$$\underline{\text{cm}} + \underline{\text{cm}} + \underline{\text{cm}} = \underline{\text{cm}}$$

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></td>
<td></td>
</tr>
<tr>
<td>$EF$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$FD$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.

$$\underline{\text{cm}} + \underline{\text{cm}} + \underline{\text{cm}} = \underline{\text{cm}}$$

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></td>
<td></td>
</tr>
<tr>
<td>$KL$</td>
<td></td>
<td></td>
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<tr>
<td>$LJ$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.

$$\underline{\text{cm}} + \underline{\text{cm}} + \underline{\text{cm}} = \underline{\text{cm}}$$

UNIT 3 LESSON 4

Draw, Estimate, and Measure 79
Find the total.

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

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

2. \[ 131 \quad \bigcirc \quad 122 \]

3. \[ 27 \quad \bigcirc \quad 35 \]

List or draw objects that show rectangles.

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

- cube
- quadrilateral
- pentagon
- hexagon

1. [Hexagon]
2. [Quadrilateral]
3. [Pentagon]
4. [Quadrilateral]
5. [Cube]
6. [Pentagon]
7. [Rectangle]
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?

Add.

2 \[53 + 28\]
3 \[87 + 45\]
4 \[36 + 79\]

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></td>
<td></td>
</tr>
<tr>
<td>(BC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(CD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(DA)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Find the distance around the rectangle.

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

6 Stretch Your Thinking Write all the names you can think of that could describe a four-sided shape.
Complete the table. Estimate the height of six people, pets, or objects. Find the actual heights. Then, subtract to find the difference between your estimate and the actual measurement.

<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>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
Make a drawing. Write an equation. Solve the problem.

1 Chase has some music CDs. 9 of them are rock music. The other 8 are pop music. How many CDs does Chase have?

Add. Use any method.

2 \[68 + 35\]
\[52 + 79\]

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>_ cm</td>
<td>_ cm</td>
</tr>
<tr>
<td>(BC)</td>
<td>_ cm</td>
<td>_ cm</td>
</tr>
<tr>
<td>(CA)</td>
<td>_ cm</td>
<td>_ cm</td>
</tr>
</tbody>
</table>

b. Find the distance around the triangle.
\[\_ \text{ cm} + \_ \text{ cm} + \_ \text{ cm} = \_ \text{ cm}\]

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.

Item 1 Estimate: ______ cm  Measure: ______ cm
Item 2 Estimate: ______ cm  Measure: ______ cm
Different 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>
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</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>Measured Length (ft or yd)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
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</tbody>
</table>
Make a matching drawing or draw comparison bars. Solve the problem.

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

   [Diagram of comparison bars]

   __________________________  label

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

2. 10¢  10¢  5¢  5¢  1¢  1¢

   [Images of coins]

   __________ __________ __________ __________ __________ __________ $___.____

   total

Label the shapes using the words in the box.

cube  quadrilateral  pentagon  hexagon

3. __________________________

4. __________________________

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

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
1. Measure each line segment.

   - _____ in.
   - _____ in.
   - _____ in.
   - _____ in.
   - _____ in.
   - _____ in.

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

   - Length of Segments (inches)

3. Ring more or less.

   - 12 centimeters

   The number of inches will be more 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?

Add.

2. \[ 74 + 15 = \]
3. \[ 47 + 26 = \]
4. \[ 58 + 34 = \]

5. Find two objects to measure in inches. 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>
</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.
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>
Make a drawing. Write an equation. Solve the problem.

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

Add.

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

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.