1. Mrs. Miller wants to estimate the width of the steps in front of her house. Select the best benchmark for her to use.

   A  her fingertip  
   B  the thickness of a dime  
   C  the width of a license plate  
   D  how far she can walk in 20 minutes  

2. **GO DEEPER**  
   Franco played computer chess for 3 hours. Lian played computer chess for 150 minutes. Compare the times spent playing computer chess. Complete the sentence.

   __________ played for __________ longer than __________.

3. Select the measures that are equal. Mark all that apply.

   A  6 feet  
   B  15 yards  
   C  45 feet  
   D  600 inches  
   E  12 feet  
   F  540 inches  

5. Josh practices gymnastics each day after school. The data shows the lengths of time Josh practiced gymnastics for 2 weeks.

**Part A**

Make a tally table and line plot to show the data.

<table>
<thead>
<tr>
<th>Time Practicing Gymnastics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (in hours)</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

- [Line plot image]

**Part B**

Explain how you used the tally table to label the numbers and plot the Xs.

**Part C**

What is the difference between the longest time and shortest time Josh spent practicing gymnastics?

____ hour

6. Select the correct word to complete the sentence.

Juan brings a water bottle with him to soccer practice.

A full water bottle holds ______ of water.

- 1 liter
- 10 milliliters
- 1 meter
7. Write the symbol that compares the weights correctly.

\[
\begin{array}{ccc}
< & = & > \\
128 	ext{ ounces} & \underline{=} & 8 	ext{ pounds} \\
8,000 	ext{ pounds} & \underline{=} & 3 	ext{ tons}
\end{array}
\]

8. Dwayne bought 5 yards of wrapping paper. How many inches of wrapping paper did he buy?

_____ inches

9. A sack of potatoes weighs 14 pounds 9 ounces. After Wendy makes potato salad for a picnic, the sack weighs 9 pounds 14 ounces. What is the weight of the potatoes Wendy used for the potato salad? Write the numbers to show the correct subtraction.

\[
\begin{array}{c}
14 \text{ pounds} \\
9 \text{ pounds}
\end{array}
\]

\[
\begin{array}{c}
14 \text{ ounces} \\
14 \text{ ounces}
\end{array}
\]

9 pounds 14 ounces

10. Sabita made this table to relate two customary units of liquid volume.

**Part A**

List the number pairs for the table. Then describe the relationship between the numbers in each pair.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

**Part B**

Label the columns of the table. Explain your answer.
11. **THINK SMARTER** The table shows the distances some students swam in miles. Complete the line plot to show the data.

<table>
<thead>
<tr>
<th>Distance Students Swam (in miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>8</td>
</tr>
</tbody>
</table>

What is the difference between the longest distance and the shortest distance the students swam?

_____ mile

12. An elephant living in a wildlife park weighs 4 tons. How many pounds does the elephant weigh?

_____ pounds

13. Katia bought two melons. She says the difference in mass between the melons is 5,000 grams. Which two melons that did Katia buy?

- A watermelon: 8 kilograms
- B cantaloupe: 5 kilograms
- C honeydew: 3 kilograms
- D casaba melon: 2 kilograms
- E crenshaw melon: 1 kilogram

14. Write the equivalent measurements in each column.

<table>
<thead>
<tr>
<th>3,000 millimeters</th>
<th>300 centimeters</th>
<th>30 centimeters</th>
</tr>
</thead>
<tbody>
<tr>
<td>35/100 meter</td>
<td>0.300 meter</td>
<td>0.35 meter</td>
</tr>
<tr>
<td>300/1,000 meter</td>
<td>350 millimeters</td>
<td>30 decimeters</td>
</tr>
</tbody>
</table>

| 3 meters | 35 centimeters | 300 millimeters |
15. Cheryl is making a mixed fruit drink for a party. She mixes 7 pints each of apple juice and cranberry juice. How many fluid ounces of mixed fruit drink does Cheryl make?

______ fluid ounces

16. Hamid’s soccer game will start at 11:00 A.M., but the players must arrive at the field three-quarters of an hour early to warm up. The game must end by 1:15 P.M.

**Part A**

Hamid says he has to be at the field at 9:45 A.M. is Hamid correct? Explain your answer.

Part B

The park closes at 6:30 P.M. There is a 15-minute break between each game played at the park, and each game takes the same amount of time as Hamid’s soccer game. How many more games can be played before the park closes? Explain your answer.

17. For numbers 17a–17e, select Yes or No to tell whether the measurements are equivalent.

17a. 7,000 grams and 7 kilograms  
○ Yes  ○ No

17b. 200 milliliters and 2 liters  
○ Yes  ○ No

17c. 6 grams and 6,000 kilograms  
○ Yes  ○ No

17d. 5 liters and 5,000 milliliters  
○ Yes  ○ No

17e. 2 milliliters and 2,000 liters  
○ Yes  ○ No
18. Draw lines to match equivalent time intervals.

\[ \frac{1}{2} \text{ hour} \quad 2 \text{ hours} \quad 3 \text{ hours} \quad 8 \text{ hours} \quad 72 \text{ hours} \]

\[ \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \]

3 days 180 minutes 1,800 seconds 480 minutes 7,200 seconds

19. Anya arrived at the library on Saturday morning at 11:10 A.M. She left the library 1 hour 20 minutes later. Draw a time line to show the end time.

\[ 11:00 \text{ A.M.} \quad 12:00 \text{ noon} \quad 1:00 \text{ P.M.} \]

Anya left the library at ______ P.M.

20. The tables show patterns for some units of measurement. Write the correct labels in each table.

<table>
<thead>
<tr>
<th>Pints</th>
<th>Days</th>
<th>Feet</th>
<th>Cups</th>
<th>Week</th>
<th>Yards</th>
<th>Inches</th>
<th>Quarts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>2</td>
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<tr>
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<td>9</td>
<td>12</td>
<td>3</td>
<td>21</td>
<td>4</td>
<td>28</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td></td>
<td>4</td>
<td>28</td>
<td>4</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

21. An Olympic swimming pool is 25 meters wide. How many decimeters wide is an Olympic swimming pool?

______ decimeters wide

22. Frankie is practicing for a 5-kilometer race. His normal time is 31 minutes 21 seconds. Yesterday it took him only 29 minutes 38 seconds.

How much faster was Frankie yesterday than his normal time?