1  In the number shown, one digit is underlined and one digit is circled.

\[70,000\]

Which statement about the circled digit is true?

A  Its value is 10 times greater than the value of the underlined digit.

B  Its value is \( \frac{1}{10} \) the value of the underlined digit.

C  Its value is 70 times the value of the underlined digit.

D  Its value is \( \frac{1}{70} \) the value of the underlined digit.

2  Lillian paid sixty-one dollars and thirty-nine cents for groceries. The digit 3 in this number has a value of —

A  \((3 \times 10)\) dollars

B  \((3 \times 1)\) dollars

C  \((3 \times 0.01)\) dollar

D  \((3 \times 0.1)\) dollar
3  Antwaan decorated 2.5 cakes with chocolate icing. Which fraction is equivalent to this number?

A  \( \frac{25}{100} \)

B  \( \frac{5}{10} \)

C  \( 2 \frac{5}{10} \)

D  \( 2 \frac{5}{100} \)

4  Which expression is equivalent to \( \frac{6}{5} \)?

A  \( \frac{1}{6} + \frac{1}{5} \)

B  \( \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} \)

C  \( \frac{1}{5} + \frac{6}{1} \)

D  \( \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} \)
The two models are shaded to represent the same fraction, \( \frac{5}{7} \).

Which equation shows that the two models represent the same fraction?

A \[ \frac{2}{7} + \frac{3}{7} = \frac{4}{7} + \frac{1}{7} \]

B \[ \frac{2}{7} + \frac{3}{7} = \frac{5}{7} + \frac{1}{7} \]

C \[ \frac{1}{2} + \frac{1}{3} = \frac{1}{4} + \frac{1}{1} \]

D \[ \frac{1}{2} + \frac{1}{3} = \frac{1}{5} + \frac{1}{1} \]
6 Which statement about the fractions \( \frac{5}{10} \) and \( \frac{6}{12} \) is true?

A These fractions are both greater than 1, because their denominators are greater than their numerators.

B These fractions are both equal to 1, because their denominators are greater than their numerators.

C These fractions are equivalent, because their denominators are half their numerators.

D These fractions are equivalent, because their denominators are twice their numerators.

7 Faith has completed \( \frac{6}{18} \) of her math homework. Olivia has completed \( \frac{4}{9} \) of her math homework. Which of these girls has completed a greater fraction of her math homework?

A Faith, because \( \frac{6}{18} > \frac{4}{9} \)

B Faith, because \( \frac{6}{18} < \frac{4}{9} \)

C Olivia, because \( \frac{4}{9} < \frac{6}{18} \)

D Olivia, because \( \frac{4}{9} > \frac{6}{18} \)
8. Cara and Elena used fabric to make costumes for a talent show. Cara used $\frac{4}{8}$ of the fabric for her costume. The girls used $\frac{6}{8}$ of the fabric altogether.

What fraction of the fabric did Elena use?

A. $\frac{10}{16}$
B. $\frac{10}{8}$
C. $\frac{2}{8}$
D. $\frac{1}{2}$

9. Hailey and Wendy painted an entire wall together. Hailey painted $\frac{3}{7}$ of the wall, and Wendy painted the rest. Which statement is true?

A. Hailey painted less than half the wall, and Wendy painted more than half the wall.
B. Hailey painted more than half the wall, and Wendy painted less than half the wall.
C. Each girl painted more than half the wall.
D. Each girl painted less than half the wall.
10  The locations and lengths of three of the longest tunnels in the world are listed.

- Gotthard Base Tunnel in Switzerland, 57.07 km
- Seikan Tunnel in Japan, 53.85 km
- Channel Tunnel between England and France, 50.45 km

What is the difference between the length of the Channel Tunnel and the length of the Gotthard Base Tunnel in kilometers?

A  3.22 km
B  7.62 km
C  6.62 km
D  7.42 km

11  Kareem will use beads to make bracelets. He has 475 beads and needs to use 9 beads for each bracelet. What is the greatest number of bracelets Kareem can make with 475 beads?

A  52
B  49
C  45
D  53
12 Madeline has 4 rolls of tape. Each roll contains 63 inches of tape. Madeline used 42 inches of tape for a project. Which diagram shows a way to find \( n \), the number of inches of tape that Madeline has left?

A

\[
\begin{array}{cccc}
63 & 63 & 63 & 63 \\
\end{array}
\]

\[
\overline{n}
\]

B

\[
\begin{array}{cccc}
63 & 63 & 63 & 63 \\
\end{array}
\]

\[
\overline{n} 42
\]

C

\[
\begin{array}{cc}
42 & 63 \\
\end{array}
\]

D

\[
\begin{array}{cc}
63 & 42 \\
\end{array}
\]

\[
\overline{n}
\]
The table shows a relationship between the input numbers and the output numbers generated by a number machine.

Number Machine

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>79</td>
</tr>
<tr>
<td>2</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>81</td>
</tr>
<tr>
<td>4</td>
<td>82</td>
</tr>
</tbody>
</table>

Which number machine shows the same relationship as the one shown in the table?

A  Input → +1 → Output

B  Input → ×40 → Output

C  Input → +78 → Output

D  Input → ×79 → Output
14. The model shows a rectangular field with a length of 150 m. The perimeter of the field is 400 m.

What is the width of the field in meters?

A. 250 m  
B. 100 m  
C. 125 m  
D. 50 m

15. Which figure cannot have parallel line segments?

A. Square  
B. Pentagon  
C. Triangle  
D. Trapezoid
16 Angle $N$ is shown on this protractor.

What is the measure of angle $N$ to the nearest degree?

A 75°
B 105°
C 80°
D 180°
17 Frank is using a protractor to construct an angle that measures 65°. First he draws ray $PQ$, as shown on the protractor.

To complete the 65° angle, Frank should draw another ray that starts at point $P$ and passes through —

A  point $R$
B  point $S$
C  point $T$
D  point $V$
18 Angle 1 and angle 2 form a right angle.

The measure of angle 1 is 32°. What is the measure of angle 2?

A 32°  
B 90°  
C 58°  
D 62°

19 Vivian had a $5 bill, 3 quarters, 2 dimes, and 5 nickels. She paid for a poster that cost $5.36. How much money does she have left?

A $1.16  
B $0.84  
C $6.20  
D $0.04
20 The table shows the number of pets that each student in Mrs. Morris’s class owns.

<table>
<thead>
<tr>
<th>Number of Pets</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Which dot plot represents the data in the table?
Karnika recorded the number of minutes she practiced volleyball each week for several weeks. She used a stem and leaf plot to organize the data.

Volleyball Practice Time

<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>0 2 2</td>
</tr>
<tr>
<td>15</td>
<td>5 5</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
</tr>
</tbody>
</table>

14|2 means 142 minutes.

Based on the data, what is the amount of time in minutes Karnika practiced volleyball?

A  894 min
B  597 min
C  594 min
D  1,224 min
22  Raina sold pens decorated with fancy tape.

- Raina’s expenses were $11.57 for supplies.
- Raina sold 12 pens for $2 each.

What was Raina’s profit?

A  $24.00
B  $35.57
C  $12.43
D  $2.43

23  Which of these services is not provided by a financial institution such as a bank or credit union?

A  Informing customers of the amount of money in their accounts
B  Informing customers of how the money in their accounts must be spent
C  Providing cash when customers make withdrawals from their accounts
D  Providing loans to customers that can be paid back over time with interest