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

\[77,000\]

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 \( \frac{25}{10} \)

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

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

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

B

\[
\begin{array}{cccc}
63 & 63 & 63 & 63 \\
\hline
n & 42
\end{array}
\]

C

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

D

\[
\begin{array}{cc}
42 & 63 \\
\hline
n
\end{array}
\]
The table shows a relationship between the input numbers and the output numbers generated by a 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>Students’ Pets</th>
<th>Number of Pets</th>
<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>⬤</td>
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<tr>
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<tr>
<td></td>
<td>2</td>
<td>⬤ ⬤</td>
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<tr>
<td></td>
<td>5</td>
<td>⬤</td>
</tr>
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Which dot plot represents the data in the table?
21 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>
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<tr>
<td>14</td>
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<tr>
<td>15</td>
<td>55</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
<table>
<thead>
<tr>
<th>Item Number</th>
<th>Correct Answer</th>
<th>Reporting Category</th>
<th>Readiness or Supporting</th>
<th>Content Student Expectation</th>
<th>Process Student Expectation</th>
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<td>4.1 (B),(G)</td>
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<td>4.1 (A),(B),(D),(F)</td>
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