1. **Order** the set of numbers on a number line.
   4,259, 2,061, 4,870, 3,293

2. **Write a word phrase** that can be represented by “$q - 53$.”
   a) 53 more than a number $q$
   b) 53 less than a number $q$

3. **Evaluate**
   $7(6k + 7b + 3)$ for $k = 3$ and $b = 11$
   a) 686
   b) 691

4. **Evaluate**
   $57 + 9n$, for $n = 12$
   a) 165
   b) 166

5. **Simplify**
   $-|4|$
   a) $-4$
   b) $|4|$

6. **Use**, =, or > to make the statement true.
   $9 ÷ 3 \cdot 7$ \(\neq\) $9 ÷ (3 \cdot 7)$
   a) >
   b) =

7. The temperature in your town is 55°F. The radio announcer says that the temperature will **drop 12 degrees**. Write an expression to compute the final temperature. What will the temperature be?
   a) $55 + (-12) = 43°F$
   b) $12 + (-55) = -43°F$
Find the sum

\[ 6 + 71 + (-205) + (-150) \]

\[ \boxed{\text{a) 132}} \]
\[ \boxed{\text{b) -278}} \]

Order the set of numbers on a number line.

0.54, 0.55, 0.58, 0.5

\[ \boxed{\text{a) 0.5}} \]
\[ \boxed{\text{b) 0.5}} \]

A submarine at the surface dives 550 ft and then another 200 ft. Write the final depth as an integer.

\[ \boxed{\text{a) 675 ft}} \]
\[ \boxed{\text{b) -750 ft}} \]

Simplify the product.

\[ -4 \cdot 5 \cdot 3 \]

\[ \boxed{\text{a) -60}} \]
\[ \boxed{\text{b) -20}} \]
Which quadrant does the point lie? Write the coordinates of the point.

12 \( A = \)

- quadrant I; (4, 6)
- quadrant III; (–4, –6)

13 \( C = \)

- quadrant IV; (2, –2)
- quadrant III; (–2, 2)

14 Name the property shown.

\[3 + 7 = 7 + 3\]

- Identity Property of Multiplication
- Commutative Property of Addition

15 Name the property shown.

\[(8 + 5) + 10 = 8 + (5 + 10)\]

- Commutative Property of Multiplication
- Associative Property of Addition

16 Simplify using distributive property.

\[7(g + 1)\]

- \(7g + 7\)
- \(7g + 1\)
17  **Simplify.**  
   
   $9(5t - 6)$

- 45$t$ - 6
- 45$t$ - 54

18  Suppose you average **38 mi/h** traveling on the highway. If you drive for **3 hours**, how far did you travel?

- 120 miles
- 114 miles

19  **Simplify using distributive property.**  
   
   $8 - 5(-6x + 4)$

- 30$x$ - 12
- 30$x$ + 12

20  **Name the coefficients** in the expression $4x + 9 - y$.

- 4
- 4, -1

21  **Name the like terms** in the expression $5a + 8 - 3a + 11$.

- 5$a$, $-3a$
- 5$a$, 8

22  **Name the constant(s)** in the expression $7x + 9y + 3$.

- 9
- 3

23  Is the given number a solution of the equation?  
   
   $n = 3n - 8$; 8

- yes
- no

24  Write an equation. Is the given value a solution?

A farmer sees 56 of his cows **out of the barn.** He knows that he has **83 cows** altogether. Let $c$ represent the number of cows **still in the barn.**

Are there 33 cows **still in the barn**?

- 83 + $c$ = 56; No
- 56 + $c$ = 83; No
25. State whether the equation is true, false, or an open sentence.
   \[ 5(-2 - 3) = 5(2 - 7) \]

- true
- open sentence

26. Solve the equation.
   \[ p - 20 - 39 = -74 \]

- \(-15\)
- \(-93\)

27. Solve the equation.
   \[ p + (-7) = -16 \]

- \(-9\)
- \(9\)

28. Solve the equation.
   \[ 6p = -12 \]

- \(-2\)
- \(-18\)

29. Tom saves $35 each month. At this rate, how many months will he need to save $245?

- 6 months
- 7 months

30. Solve the equation.
   \[ 8 = \frac{c}{-8} \]

- \(16\)
- \(-64\)

31. Write an inequality for the graph.

- \(x < -3\)
- \(x \leq -3\)

32. A road has a speed limit of 50 mi/h. Write an inequality that describes the legal speeds \(r\) for motor vehicles.

- \(r \leq 50\)
- \(r \geq 50\)
33 Graph the inequality.\[ p \leq -8 \]

34 Solve the inequality.\[ a + 4 \leq 9 \]

35 Solve the inequality.\[ y - 7 \leq 0 \]

36 Solve the inequality.\[ \frac{t}{7} \leq -3 \]

37 Solve the inequality.\[ \frac{w}{6} > -8 \]

38 Solve the inequality.\[ 3p > -21 \]

39 Write the next two terms in the pattern.\[ 1,024, 256, 64, 16, \underline{\quad}, \underline{\quad} \]
40. **Write the next two terms** in the pattern. 4, 7, 10, 13, ___, ___

- 16, 19
- 17, 21

41. **Identify** the picture that models \(-3x + 6\)

- \(a\)
- \(b\)

42. **Evaluate** \(5(x - 2)\) for \(x = 7\)

- 25
- 5

43. Nita read **52 pages** on Saturday and \(p\) pages on Sunday. **What expression** shows the **total number** of pages she read on these **two days**?

- \(52 \div p\)
- \(52 + p\)

44. A child’s ticket for a lighthouse tour costs $5 **less than** an **adult’s ticket**. If \(A\) represents the cost of an adult’s ticket, **what expression** represents the cost of a **child’s ticket**?

- \(5A\)
- \(A - 5\)

45. **Write the algebraic expression** that represents the sentence. “7 times the **sum** of \(g\) and \(h\)”

- \(7gh\)
- \(7(g + h)\)
Bob collected 8 times as many cans as Tom. If $t$ represents the number of cans that Tom collected, what algebraic expression represents the number of cans that Bob collected?

- $8 \cdot t$
- $9 \cdot t$

Solve for $r$

$$\frac{w}{5} = 5$$

- 30
- 25

Solve the equation.

$236 = v + 36$

- 250
- 200

Solve the equation.

$9 = s - 11$

- 20
- 99

Solve the equation.

$4n = 48$

- 12
- 52
51 How many small squares are required to form the next figure in the sequence?

③ 26  ⑤ 42

52 Evaluate the expression

\(-|−12|\)

④ 12  ⑤ -12

53 Find the difference

\(-79 − 80\)

③ -159  ⑤ 1

54 Which multiplication property is illustrated by the product \((7 \cdot 5) \cdot 4 = 7 \cdot (5 \cdot 4)\) ?

② Associative  ⑥ Identity

55 Simplify the expression

\(8x − 5 − 2x + 6\)

③ 6x + 1  ⑥ 6x + 11
56 Simplify
4x – 7(x + 2)

a) −3x – 14
b) 11x – 14

57 Find the quotient.
−20 ÷ (−4)

a) 1/5
b) 5

58 A student measured the temperature for several winter days and recorded the data in a list.
Find the mean of the temperatures listed.
−12°, 5°, −3°, 4°, 0°, −6°

a) 0°C
b) −2°C

59 Solve the equation.
\( \frac{x}{2} = 10 \)

a) −20
b) 5

60 What is the coordinates of point A?

a) (−3, −2)
b) (3, −2)
1st Semester Final Review

Answer Section

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>A</td>
</tr>
<tr>
<td>4</td>
<td>A</td>
</tr>
<tr>
<td>5</td>
<td>A</td>
</tr>
<tr>
<td>6</td>
<td>A</td>
</tr>
<tr>
<td>7</td>
<td>A</td>
</tr>
<tr>
<td>8</td>
<td>B</td>
</tr>
<tr>
<td>9</td>
<td>B</td>
</tr>
<tr>
<td>10</td>
<td>A</td>
</tr>
<tr>
<td>11</td>
<td>A</td>
</tr>
<tr>
<td>12</td>
<td>A</td>
</tr>
<tr>
<td>13</td>
<td>A</td>
</tr>
<tr>
<td>14</td>
<td>B</td>
</tr>
<tr>
<td>15</td>
<td>B</td>
</tr>
<tr>
<td>16</td>
<td>A</td>
</tr>
<tr>
<td>17</td>
<td>B</td>
</tr>
<tr>
<td>18</td>
<td>B</td>
</tr>
<tr>
<td>19</td>
<td>A</td>
</tr>
<tr>
<td>20</td>
<td>B</td>
</tr>
<tr>
<td>21</td>
<td>A</td>
</tr>
<tr>
<td>22</td>
<td>B</td>
</tr>
<tr>
<td>23</td>
<td>B</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
</tr>
<tr>
<td>25</td>
<td>A</td>
</tr>
<tr>
<td>26</td>
<td>A</td>
</tr>
<tr>
<td>27</td>
<td>A</td>
</tr>
<tr>
<td>28</td>
<td>A</td>
</tr>
<tr>
<td>29</td>
<td>B</td>
</tr>
<tr>
<td>30</td>
<td>B</td>
</tr>
<tr>
<td>31</td>
<td>B</td>
</tr>
<tr>
<td>32</td>
<td>A</td>
</tr>
<tr>
<td>33</td>
<td>B</td>
</tr>
<tr>
<td>34</td>
<td>A</td>
</tr>
<tr>
<td>35</td>
<td>A</td>
</tr>
<tr>
<td>36</td>
<td>B</td>
</tr>
<tr>
<td>37</td>
<td>B</td>
</tr>
</tbody>
</table>