1. Solve: $17 = m - 4$


2. Which of the following numbers is not composite?


3. Which number is not a factor of 30?


4. List all the factors of 54.

   [A] 1, 54  [B] 1, 5, 11, 55  
   [C] 1, 2, 3, 6, 9, 18, 27, 54  [D] 1, 2, 4, 13, 26, 52, 54

5. Write the prime factorization of 255.

   [A] $3 \times 5 \times 17 \times 17$  [B] $2 \times 3 \times 5 \times 17$  
   [C] $1 \times 3 \times 5 \times 17$  [D] $3 \times 5 \times 17$

6. What is the greatest common factor of 60 and 24?


7. Which is not a multiple of 6?

8. Find the least common multiple of 24 and 60.


9. $3\frac{1}{2} + 1\frac{1}{2} =$ (Reduce your answer.)

   [A] 4   [B] $5\frac{1}{2}$   [C] 5   [D] $4\frac{1}{2}$

10. $1\frac{1}{2} + \frac{4}{7} =$ (Reduce your answer.)

    [A] $\frac{2}{9}$   [B] $2\frac{1}{14}$   [C] $7\frac{1}{4}$   [D] $\frac{11}{14}$

11. \( \frac{7}{8} - \frac{1}{2} \) (Reduce your answer.)

    [A] $\frac{1}{40}$   [B] $\frac{3}{8}$   [C] $\frac{57}{80}$   [D] $\frac{56}{8}$

12. \( 5\frac{2}{5} - 3\frac{1}{5} \) (Reduce your answer.)

    [A] $3\frac{1}{5}$   [B] $\frac{4}{5}$   [C] $1\frac{3}{5}$   [D] $2\frac{1}{5}$
13. What is the mean of the following data?

12, 3, 4, 13


14. Find the median of 78, 51, 21, 72, and 21.


15. Name the mode or modes in the following sample.

9, 5, 28, 1, 24, 16, 9, 8, 1, 6, 24


16. Find the range of the set of numbers.

7, 13, 29, 17, 24


The circle graph below shows the main sources of water pollution.

17. According to the circle graph, which is the main source of water pollution?

[A] Industry  [B] Agriculture  [C] Sewage  [D] none of these
18. If you spin the spinner above, what is the probability of the pointer landing on R?

- [A] $\frac{1}{4}$
- [B] 1
- [C] $\frac{1}{2}$
- [D] $\frac{3}{8}$

19. How long is the line segment below the ruler?

- [A] 50 mm
- [B] 6 mm
- [C] 60 mm
- [D] 5 mm

20. A _____ would be about eight inches long.

- [A] pencil
- [B] desk
- [C] car
- [D] shoe lace

21. 7 feet = ___ inches

- [A] 21
- [B] 70
- [C] 84
- [D] 168

22. Convert 4 tons to pounds.

- [A] 4,000 lbs.
- [B] 80,000 lbs.
- [C] 8,000 lbs.
- [D] 800 lbs.
23. Which of the following is an acute angle?

[A]  

[B]  

[C]  

[D]  

24. Estimate the measure of the angle:

[A] 180°  

[B] 240°  

[C] 100°  

[D] 60°

25. Which best represents a pair of similar figures?

[A]  

[B]  

[C]  

[D]  
26. Find the perimeter of the rectangle.

\[ \text{Perimeter} = 2 \times (7 \text{ yd} + 4 \text{ yd}) = 22 \text{ yd} \]


27. What is the area of this square?

\[ \text{Area} = 6 \text{ ft} \times 6 \text{ ft} = 36 \text{ ft}^2 \]


The graph below shows the number of ice cream cones sold by different ice cream carts.

28. What is the difference in the number of cones sold between Cart 2 and Cart 5?

[A] 1 cone  [B] 40 cones  [C] \( \frac{1}{2} \) cone  [D] 45 cones
29. Using the graph above, find the difference between the amounts of rainfall in the years 1990 and 1988.


30. Which digit is in the thousandths place in 3,740.156?


31. Estimate by rounding to the greatest place: $78.2 \times 3.1$

32. $19.14 \times 32 = $

[A] 421.08  
[B] 609.28  
[C] 612.48  
[D] 292.48

33. $\overline{5)0.6}$

[A] 12.0  
[B] 0.102  
[C] 0.12  
[D] 1.2

34. Write $9\frac{3}{10}$ as an improper fraction.

[A] $\frac{102}{10}$  
[B] $\frac{93}{10}$  
[C] $\frac{87}{10}$  
[D] $\frac{90}{10}$
35. Chef Bobby Flay is going to make chili. Here is the recipe he will use.

<table>
<thead>
<tr>
<th>Tasty Chili</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ¾ cups of water</td>
</tr>
<tr>
<td>1 can of kidney beans</td>
</tr>
<tr>
<td>1/2 cup of fresh tomatoes</td>
</tr>
<tr>
<td>5/8 cup of sun-dried tomatoes</td>
</tr>
<tr>
<td>3/4 cup of frozen tomatoes</td>
</tr>
</tbody>
</table>

A. What type of tomato will Mr. Flay use the greatest amount of?

B. How many cups of tomatoes are used altogether?

C. Mr. Flay has a measuring cup that holds ¼ cup.

   How many times does he fill that cup to add the 1¾ cups of water to the chili?

   Show your work clearly or explain your answer.