1. Solve for X in the equation, \( \frac{2}{3} + \frac{14}{4} = X \), where X represents a mixed number in simplest form.
   A. \( 1 \frac{1}{4} \)  
   B. \( \frac{30}{12} \)  
   C. \( 3 \frac{3}{5} \)  
   D. \( 4 \frac{1}{6} \)

2. Of the choices below, which shape has the most lines of symmetry?
   A. a square  
   B. an equilateral triangle  
   C. a scalene triangle  
   D. a rectangle that is not a square

3. To help with the long, cold winter, Wadsworth the Walrus wanted to buy some tusk warmers. They cost $7.35 per pair and he had $50. If Wadsworth wanted to buy one fewer pair of tusk warmers than he had money for, how much money would he have left over to spend at the giant squid vs. whale fight later than evening?
   A. $12.35  
   B. $13.25  
   C. $11.65  
   D. $5.90

4. To get to her home in Fern Valley, Sparklina the Faerie flew for 167 minutes atop her Venezuelan Poodle Moth. If she left on Monday at 10:17 p.m., when did she get home?
   A. Tuesday at 2:07 a.m.  
   B. Tuesday at 12:24 a.m.  
   C. Monday at 11:57 p.m.  
   D. Tuesday at 1:04 a.m.

5. How many pounds do 2,000 tons of banana slugs weigh given that there are 16 ounces in a pound and 2,000 pounds in a ton?
   A. 32,000  
   B. 40,000  
   C. 640,000  
   D. 4 million

6. Three of the statements listed below are true. Which of the statement about triangles listed below is false and made the triangle loving Telly Monster from Sesame Street cry?
   A. a scalene triangle has 3 different side lengths  
   B. a right triangle cannot be an equilateral triangle  
   C. an obtuse triangle cannot be a scalene triangle  
   D. an acute triangle can be an isosceles triangle

7. Which of the numbers shown below is the greatest prime factor of 510?
   A. 5  
   B. 17  
   C. 47  
   D. 255

8. Which reason could the rectangles use to say the parallelogram was different from themselves and not let him into their snooty club?
   A. He had only 4 sides  
   B. He had 2 pairs of parallel sides  
   C. His interior angles weren’t right  
   D. He was a quadrilateral

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9. **Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Trial 1</th>
<th>Trial 2</th>
<th>Trial 3</th>
<th>Trial 4</th>
<th>Trial 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>0</td>
<td>8</td>
<td>32</td>
<td>98</td>
<td>200</td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>14</td>
<td>20</td>
</tr>
</tbody>
</table>

When numbers are entered into the Mix-A-Tron Brain-O-Matic for one of the variables, T or V, a formula is used to calculate the value of the other variable. The results of 5 trials are shown above. Which expression listed below correctly represents the formula in use?

A. \( V = 10 \times \frac{T}{2} \)
B. \( T = \frac{V}{4} + 2 \)
C. \( V = T - 4 \times V \)
D. \( T = \frac{(V \times V)}{2} \)

10. There will be an attack upon your garden, a single zombie at a time. In total, the attack will include 4 wearing buckets on their heads, 3 running with poles to vault with, 6 wearing traffic cones on their heads, 4 using screen doors as a shield, 2 holding onto balloons and floating through the air, and one really big one named Giagantor. What is the probability that the very first zombie to attack will be one who is wearing a traffic cone on its head?

A. \( \frac{1}{3} \)
B. \( \frac{3}{10} \)
C. \( \frac{4}{9} \)
D. \( \frac{6}{19} \)

11. If \( F = 2 \), \( H = 5 \), \( K = 1 \), \( T = 6 \), and \( Z = 3 \), what does the expression \( F + (H - K \times 2) + T \times Z \) equal?

A. 33
B. 30
C. 54
D. 23

12. During each day of the week, Brewster noted the following number of deer playing around his home in the country: \( [8, 3, 8, 11, 14, 5, 8] \). During this same period of time, Brewster also tracked how many antelope he saw playing around his home, as listed: \( [13, 18, 21, 18, 12, 19, 16] \). What is the difference between the ranges of the number of deer and antelope playing around his home?

A. 8
B. 11
C. 2
D. 18

13. A straight line in the coordinate plane passes through points \((3,5)\) and \((15,25)\). What other point will this line pass through?

A. \((0,2)\)
B. \((21,35)\)
C. \((9,18)\)
D. \((35,45)\)

14. A perfect square of a whole number is the result of multiplying a whole number by itself. How many perfect squares are there that are less than 80 and greater than 4?

A. 3
B. 6
C. 7
D. 9

15. Five pigeons found a large slice of bread. They decided to cut it up into equal sized pieces and each pigeon would get two such pieces for themselves. One pigeon gave one half of one of her pieces to a little old lady on a park bench. What fraction of the slice of bread did the little old lady get?

A. \( \frac{1}{20} \)
B. \( \frac{1}{5} \)
C. \( \frac{1}{10} \)
D. \( \frac{1}{12} \)