

- 1.) Carol walks every day. Keeping track of the distances, she realized that she had walked a total of 2,352 kilometers. Find the number of days she walked if she averaged 24 kilometers per day.

A. 96 days      B. 98 days      C. 100 days      D. 102 days

- 2.) The time now is 12:33 p.m. What time was it 47 minutes ago?

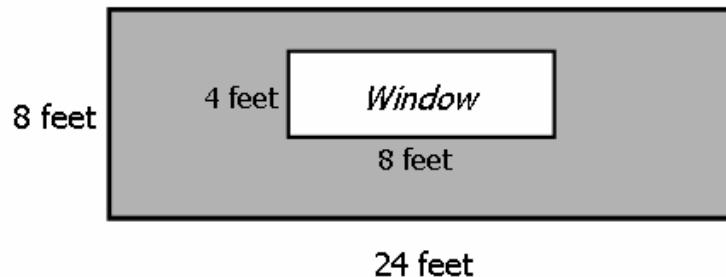
A. 1:20 p.m.      B. 11:46 a.m.  
C. 11:56 a.m.      D. 11:14 a.m.

- 3.) In the addition problem below, if  $x$  and  $y$  are 1-digit numbers, the smallest possible value of  $x$  is:

$$8 + x + y = 22$$

A. 0      B. 2      C. 5      D. 9

- 4.) You are going to wallpaper the wall below, excluding the window. Each roll of paper covers 30 square feet. How many rolls will you need to buy?



A. 5 rolls      B. 6 rolls      C. 7 rolls      D. 8 rolls

- 5.) A stop sign is in the shape of a regular octagon. The area of the octagon is approximately 840 square inches, and the perimeter of the octagon is 96 inches. What is the length of one side of the stop sign?

A. 12 inches      B. 105 inches  
C. 14 inches      D. None of the above

6.) What is the next number in the pattern?

3, 5, 11, 21, 35, \_\_\_\_

- A. 43                      B. 45                      C. 49                      D. 53

7.) What is the sum of all the factors of the number 15?

- A. 8                      B. 15                      C. 24                      D. 225

8.) Rachel decided to write down all the whole numbers from 1 to 70. How many times did she write the digit 4?

- A. 4                      B. 7                      C. 16                      D. 17

9.) A square has an area of  $64 \text{ ft}^2$ . Find the perimeter of the square.

- A.  $32 \text{ ft}^2$                       B.  $32 \text{ ft}$                       C.  $128 \text{ ft}^2$                       D.  $128 \text{ ft}$

10.) At \$0.58 per pound, how much will Artie pay for a piece of chocolate weighing 4 pounds 8 ounces?

- A. \$2.32                      B. \$2.61                      C. \$2.78                      D. None of the above

11.) Which is the whole number solution set for the following inequality?

$$x - 3 \leq 5$$

- A. {3, 4, 5, 6, 7, 8}                      B. {0, 1, 2, 3, 4, 5, 6, 7}  
C. {0, 1, 2, 3, 4, 5, 6, 7, 8}                      D. {9, 10, 11, 12, 13, 14, 15 ...}

12.) Evaluate:  $\frac{(3^2 + 6 \cdot 9) - (5^2 + 2 \cdot 5)}{4}$

- A. 7                      B.  $9\frac{1}{2}$                       C.  $13\frac{1}{2}$                       D.  $24\frac{1}{2}$

- 13.) Jeff has  $5\frac{3}{4}$  yards of string. He uses  $2\frac{3}{8}$  yards to put up a sign in his house and he uses  $\frac{5}{8}$  yard for his shoelaces. What length of string does Jeff have left?

A. 2.34 yards                      B. 2.5 yards  
C. 2.75 yards                      D. 3 yards

- 14.) If  $\frac{4}{7} \div \frac{n}{12} = \frac{4}{7} \times \frac{n}{12}$ , what is the value of  $n$ ?

A. 1                      B. 12                      C. 24                      D. None of the above

- 15.) Which three points below, when connected, form a right triangle?

A. (1, 2); (1, 5); (6, 2)  
B. (2, 3); (2, 7); (2, 10)  
C. (1, 1); (3, 3); (4, 1)  
D. (0, 0); (5, 0); (1, 5)

- 16.) An eight sided data generator is labeled with the whole numbers 1 to 8. What is the probability of rolling the data generator and *not* getting a prime number?

A.  $\frac{1}{2}$                       B.  $\frac{5}{8}$                       C.  $\frac{3}{4}$                       D. 0

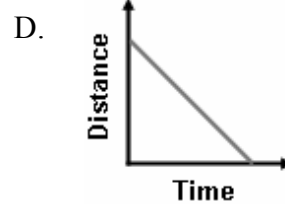
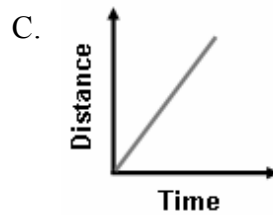
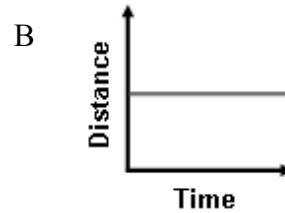
- 17.) The operation  $\Theta$  is defined by: *the sum of 2 times the first number and the second number.*

For example:  $4 \Theta 7 = 2(4) + 7 = 8 + 7 = 15$ .

Find the value of  $(3 \Theta 5) \Theta 8$ .

A. 11                      B. 16                      C. 19                      D. 30

- 18.) Which graph below illustrates a carousel rider's distance from the center of the carousel?



- 19.) Subtract three and fifty six hundredths from five and four tenths.

A. 1.64      B. 1.74      C. 1.83      D. 1.84

- 20.) Chris is making a necklace with colored beads. The pattern of the colors is: red, blue, green, white, red, blue, green, white, red, blue, green, white, etc... What color is the 37<sup>th</sup> bead?

A. red      B. blue      C. green      D. white

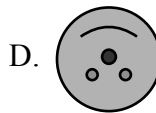
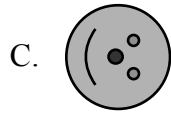
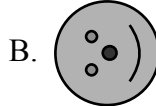
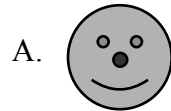
- 21.) What is the smaller angle formed by the hands of a clock when it is 5:00?



A.  $90^\circ$       B.  $120^\circ$       C.  $150^\circ$       D.  $180^\circ$

- 22.) Gloria gave  $\frac{1}{3}$  of her pieces of candy to Deborah, and then Gloria gave  $\frac{1}{4}$  of what was left to Kyle. Gloria was left with 12 pieces of candy. How many pieces of candy did she have to start?
- A. 24                      B. 36                      C. 48                      D. 144
- 23.) In a class election three students were running for President. Bill and Pam together received 75% of the votes. Bill and Rob together received 95 votes. Pam received 85 votes by herself. How many votes did Rob receive?
- A. 45                      B. 50                      C. 135                      D. 180
- 24.) In a bag there are slips of paper numbered with the whole numbers from 1 to 12. What is the probability of selecting a number that is prime *and* a factor of 10?
- A.  $\frac{1}{6}$                       B.  $\frac{1}{3}$                       C.  $\frac{5}{12}$                       D.  $\frac{7}{12}$
- 25.) Which solid figure below has 5 faces, 6 vertices, and 9 edges?
- A. rectangular prism                      B. triangular prism  
C. square pyramid                      D. triangular pyramid
- 26.) Find the value of  $n$ :  $\frac{n}{8} \div \frac{9}{n} = \frac{1}{2}$
- A. 9                      B. 8  
C. 36                      D. 6

- 27.) Which shows the figure rotated, around the nose,  $90^\circ$  counter-clockwise and then reflected over the line?



- 28.) Jill measured herself to be  $2\frac{1}{6}$  yards tall. Find how tall Jill is in inches.

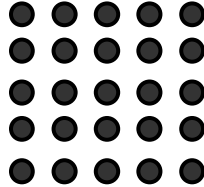
- A. 54 inches  
B. 72 inches  
C. 78 inches  
D. 80 inches

- 29.) Each  $\square$  in the addition problem stands for the same digit. What is the missing digit?

$$\begin{array}{r} 3\square\square \\ + \square 5\square \\ \hline 1134 \end{array}$$

- A. 2  
B. 4  
C. 7  
D. None of the above

- 30.) Numerals formed by grouping quantities by tens are called base ten numerals. For example the dots below represent the base ten numeral  $25_{ten}$ , which means '2 groups of 10 with 5 singles'. Base four numerals are formed by grouping quantities by fours. What is the base four numeral for the same number of dots?



- A.  $25_{four}$       B.  $61_{four}$       C.  $100_{four}$       D.  $121_{four}$