Mr Lewis Algebra 1 Quick Quiz

November 24, 2021

1

A store is advertising notebook paper in a back-to-school sale as "Buy one, get one free." The store posted the table below, but one value is missing.

Number of Packages	2	4	6	8	10
Total Cost	\$0.50	\$1.00	\$1.50	\$2.00	?

What value will correctly complete the pattern in the table?

- A \$2.00
- B \$2.25
- C \$2.50
- D \$3.00

2.

In the equation y = 2x, what is the value of y when x = 3?

- A 5
- B 6
- C 7
- D 9

3.

Which expression BEST approximates 6.81 × 7.82 × 8.49?

- A  $6 \times 7 \times 8$
- B  $6 \times 7 \times 9$
- $\textbf{C} \quad 7\times8\times8$ 
  - $7 \times 8 \times 9$

## 4.

Which expression is equivalent to  $(2x^3)(x^5)$ ?

- $\mathbf{A} \quad x^{10}$
- B  $2x^8$
- C  $2x^{15}$
- D  $3x^8$

## 5.

Which expression correctly uses the distributive property to rewrite the expression 7(y+5)?

- A 5+7y
- B 5(7 + y)
- C 7y + 35
- D 12(7 + y)

## 6.

Suzy is competing in a long-distance bicycle race. In the first 6 hours, she completed 132 miles of the race. If she plans to ride 7 hours per day, how many days will it take for her to complete the 616-mile race at the same rate?

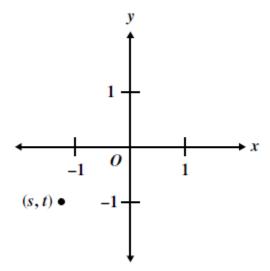
- A 2
- B 4
- C 6
- D 8

What is d if 94 = 2d + 80?

- A 2
- B 4
- C 7
- D 8

8.

If (s,t) denotes the coordinates of the point shown in the graph below, which of the following must be true?



- $\mathbf{A} \quad s > 0 \text{ and } t > 0$
- $\mathbf{B} \quad s > 0 \text{ and } t < 0$
- C s < 0 and t > 0
- $\mathbf{D} \quad s < 0 \text{ and } t < 0$

9.

What is the equation of a line that has a slope of  $\frac{3}{4}$  and an *x*-intercept of 0?

- $\mathbf{A} \quad y = 0$
- $\mathbf{B} \quad \mathbf{y} = \frac{3}{4}$
- $C y = \frac{3}{4}x$
- $\mathbf{D} \quad y = x + \frac{3}{4}$

10.

What does  $8 \div 4 \times 2 + 2$  equal?

- $A = \frac{1}{2}$
- B 3
- C 6
- D 8

BONUS

The quadratic function y=k(x) is graphed in the *xy*-coordinate plane and has its vertex at (-2,0). Which could be the equation of k?

$$egin{array}{ccc} egin{array}{ccc} egin{array}{ccc} A_{\cdot} & k(x) = (x-4)^2 \end{array}$$

© B. 
$$k(x) = (x-2)^2$$

$$\odot$$
 C.  $k(x)=(x+2)^2$ 

D. 
$$k(x) = (x+4)^2$$