

1. A 12-ounce box of cereal costs \$3.60. Which equation correctly relates the price (p) with the weight (w) of the cereal?

- A** $p = 3.3w$ **B** $p = 0.3w$ **C** $p = 3.6w$ **D** $p = 12w$

2. A hot dog costs \$2 at the ballpark. Which equation shows the total cost, c , of n hot dogs?

- A** $c = 2 + n$ **B** $n = 2 + c$ **C** $c = 2n$ **D** $n = 2c$

3. The amount of blood in a person's body depends on their body weight. A person weighing 120 pounds has about 20 pints of blood in their body. Which equation below represents the relationship between pints of blood, b , and a person's weight, w ?

- A** $b = \frac{1}{6}w$ **B** $b = 6w$ **C** $b = w + 6$ **D** $b = w - 6$

4. The number of gallons of gas, g , used by a car is proportional to the number of miles, m , with a constant average miles per gallon, a . Which equation represents this relationship?

- A** $g - m = a$ **B** $\frac{m+g}{2} = a$ **C** $a = gm$ **D** $g = am$

5. Mr. Kelly pays \$12,564 a year for rent. His rent is a constant amount each month. Which equation represents the amount he pays per month if m = months and c = total rent paid for the year?

- A** $1,047m = c$ **B** $m \div 1,047 = c$ **C** $1,047 + m = c$ **D** $1,047c = m$

6. Nicholas is typing a book report at an average speed of 30 words per minute. Which equation could Nicholas use to find t , the amount of time in minutes he will spend typing, if his report has w words?

- A** $t = 30w$ **B** $w = 30t$ **C** $t = w + 30$ **D** $w = t + 30$

7. Tammy earns \$16.50 in three hours. Which equation represents Tammy's income, l , in dollars, as a function of time, t , in hours?

- A** $l = 16.5t$ **B** $l = 7t - 4.5$ **C** $l = 3t + 16.5$ **D** $l = 5.5t$

8. The cost of one movie ticket for an adult is 1.6 times the cost of a ticket for a child. If a equals the cost of one adult ticket and c equals the cost of one child ticket, which equation represents the relationship between a and c ?

- A** $a = 1.6c$ **B** $c = 1.6a$ **C** $1.6 = a + c$ **D** $1.6 = a - c$

9. For every 10 apples gathered from trees in an orchard, there are 9 apples that are good to sell. Which equation determines the constant relationship between g , the number of apples gathered, and s , the number of apples good to sell?

- A** $s = 0.9g$ **B** $s = 1.1g$ **C** $g = s - 1$ **D** $g = s + 1$

10. Richard is buying hamburgers. He can buy 5 hamburgers for \$6.20 or 12 hamburgers for \$14.88. Which equation represents the cost, y , of x hamburgers?

- A** $y = 1.20x$ **B** $x = 1.20y$ **C** $y = 1.24x$ **D** $x = 1.24y$