Function Notation – Practice

1. Evaluate the function $f(x) = 11 - 3x + 2$ for:

   $f(-2)$

   $f(0)$

   $f(5)$

2. For the function $h(x) = -8x + 14$, find the value of x so that:

   $h(x) = -2$ $h(x) = 30$

3. For $h(x) = \frac{1}{4}x - 2$, what is $h(8)$?

4. What value of x makes $f(x) = 5$ if $f(x) = -2x + 25$?

   A -15

   B -10

   C 10

   D 15

5. For $f(x) = -5x + 4$, what is the value of x for which $f(x) = 29$?

   A 1

   B -5

   C -4

   D 5

6. For the function $h(x) = -4x + 2$, which statement is true?

   A $h(-1) = -4$

   B $h(-1) = -2$

   C $h(-1) = 2$

   D $h(-1) = 6$

7. Which is not true for the function $h(x) = -2x + 7$?

   A $h(-2) = 3$

   B $h(-1) = 9$

   C $h(3) = 1$

   D $h(4) = -1$

8. For $g(x) = -4x + 12$, what is $g(5)$?

9. A city employee paints curbs in parking lots and replaces road signs. It takes 0.5 hour to paint a parking lot curb and 2.5 hours to replace a road sign. The function $c(r) = \frac{40 - 2.5r}{0.5}$ can be used to determine c, the number of parking lot curbs the employee paints when he replaces r road signs in a 40-hour workweek. For which of the following is $c(r) = 20$?

A   20 parking lot curbs

B   20 road signs

C   12 parking lot curbs

D   12 road signs

10. Joshua is driving to the store. The average distance d, in miles, he travels over t minutes is given by the function $d(t) = 0.5t$. What is the value of $d(15)$?

A   75 miles

B   7.5 minutes

C   7.5 miles

D   15 minutes

11. The length, in feet, of a small train at an amusement park can be modeled by the function $f(c) = 9c + 14$, where c is the number of passenger cars attached to the locomotive. The original passenger cars were replaced, and the length of the train is now modeled by the function $h(c) = 12c + 14$. Based on this information, which statement is not true?

A $f(8) = h(8)$

B $f(1) < h(1)$

C $h(4) < f(6)$

D $h(6) = f(8)$

12. If $(-4, f(x))$ is the solution to the equation $f(x) = -2x - 8$ what is the value of $f(-4)$?

Record your answer and fill in the bubbles in the grid.