

A.12B Evaluate Functions in Function Notation

Some questions (c) 2017 by Region 10 Educational Service Center.

Some questions (c) 2017 by The Texas Education Agency.

Some questions (c) 2017 by TEKS Resource System.

1 If $f(x) = 2(x - 3) + 4$, what is $f(-2)$?

2 If $f(x) = 2(x - 3) + 4$, find $f(-8)$.

3 What is the value of this function evaluated at $f(-3)$?

$$f(x) = 2x^2 + 5x - 9$$

4 A certain function is represented by $f(x) = -4x^2 - 3x + 2$. What is the value of $f(-2)$?

5 If $f(x) = 2x^2 - 4x$, what is the value of $f(3)$?

6 Given $f(x) = 6(1 - x)$, what is the value of $f(-8)$?

7 If $p(x) = 5(x^2 + 1) + 16$, what is the value of $p(11)$?

8 Given $f(x) = \frac{1}{3}(4 - x)^2$ what is the value of $f(16)$?

9 Given $f(x) = 3x + 1$, what is the value of $f(-\frac{2}{3})$?

10 If $f(x) = (x - 3)^2 + 4$ and $g(x) = x^3 + 2$, which statement is true?

A $f(-2) = g(-3)$

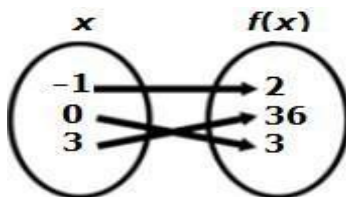
B $f(0) = g(-1)$

C $f(8) = g(3)$

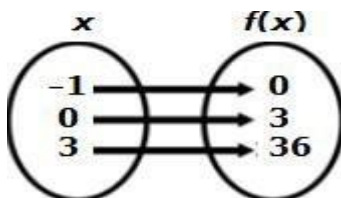
D $f(2) = g(1)$

11 Which mapping best represents the function $f(x) = 2x^2 + 5x + 3$ when the domain is $\{-1, 0, 3\}$?

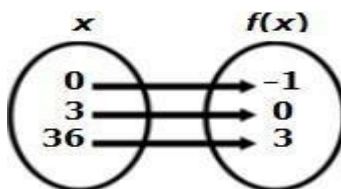
A



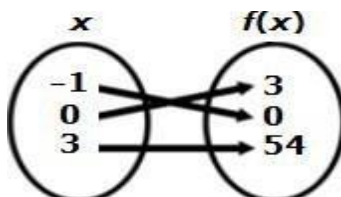
B



C



D



12 A baker determined the annual profit in dollars from selling pies using $p(n) = 52 - 0.05n^2$, where n is the number of pies sold. What is the annual profit if the baker sells 400 pies?

A \$20,780

B \$12,800

C \$28,800

D \$20,760

13 Carlisle Carpet Cleaning is running a sale on carpet cleaning. For all carpet cleaning jobs of at least five rooms they are offering to clean the carpet in the first room for free with all additional rooms charged at \$35 per room. They also charge a base fee of \$25.50 for supplies. The formula below is used to calculate total cost, $C(r)$, in terms of number of carpeted rooms to be cleaned, r .

$$C(r) = 25.50 + 35.00(r - 1)$$

What would be the cost for Carlisle Carpet Cleaning to clean the carpet of 8 rooms?