

1. Given the function $f(x) = 2x^2 - 5$, what is the value of $f(-4)$?

Answer Choice	Correct Answer Feedback	Incorrect Answer Feedback
A -37		Incorrect. $(-4)^2 = 16$ not -16 .
B -21		Incorrect. $(-4)^2 = 16$ not -8 .
C 11		Incorrect. $(-4)^2 = 16$ not 8.
D 27	Correct! $f(-4) = 2(-4)^2 - 5 = 2(16) - 5 = 32 - 5 = 27$	

2. If $f(-3) = 12$, which of the following best represents $f(n)$?

Answer Choice	Correct Answer Feedback	Incorrect Answer Feedback
A $f(n) = n^2 + 3$	Correct! $f(-3) = (-3)^2 + 3 = 9 + 3 = 12$	
B $f(n) = 2n^2$		Incorrect. $2(-3)^2 = 18$ not 12.
C $f(n) = 4n$		Incorrect. $4(-3) = -12$ not 12.
D $f(n) = 2n + 6$		Incorrect. $2(-3) + 6 = 0$ not 12.

3. A function is described by $f(x) = 5x - 3$ and input values of $\{-3, -1, 0, 2, 5\}$, which of the following is a corresponding output value?

Answer Choice	Correct Answer Feedback	Incorrect Answer Feedback
A 12		Incorrect. $5(-3) = -15$ not 15.
B 7	Correct. $f(2) = 5(2) - 3 = 10 - 3 = 7$	
C 2		Incorrect. $5(0) = 0$ not 5.
D 25		Incorrect. You still need to subtract 3 from the product of $5(5)$.

4. Given the function $f(x) = x^2 - 5x + 3$, what is the value of $f(-3)$?

Answer Choice	Correct Answer Feedback	Incorrect Answer Feedback
A -3		Incorrect. $-5(-3) = 15$ not -15 .
B -6		Incorrect. $(-3)^2 = 9$ not 6 and $-5(-3) = 15$
C 24		Incorrect. $(-3)^2 = 9$ not 6.
D 27	Correct ! $f(-3) = (-3)^2 - 5(-3) + 3 = 9 + 15 + 3 = 27$	