

Name : _____

Evaluating Quadratic Functions

T2ES1

Evaluate each quadratic function for the given x -value.

1) $f(x) = (x - 7)^2 + 4$ at $x = -6$

2) $f(x) = 5x^2 - 2x + 1$ at $x = 4$

3) $f(x) = x^2 - 14x$ at $x = 7$

4) $f(x) = -10x^2 + 13x - 3$ at $x = -1$

5) $f(x) = 3x^2 - 4x - 9$ at $x = -2$

6) $f(x) = 5(x - 3)(x - 2)$ at $x = 9$

7) $f(x) = 2(x + 3)^2 - 5$ at $x = 3$

8) $f(x) = 2x^2 + 7$ at $x = 0$

9) $f(x) = (-x + 2)(x - 15)$ at $x = -10$

10) $f(x) = -x^2 + 7x + 10$ at $x = -8$

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Answer key

Evaluating Quadratic Functions

T2ES1

Evaluate each quadratic function for the given x -value.

1) $f(x) = (x - 7)^2 + 4$ at $x = -6$

$f(-6) = 173$

2) $f(x) = 5x^2 - 2x + 1$ at $x = 4$

$f(4) = 73$

3) $f(x) = x^2 - 14x$ at $x = 7$

$f(7) = -49$

4) $f(x) = -10x^2 + 13x - 3$ at $x = -1$

$f(-1) = -26$

5) $f(x) = 3x^2 - 4x - 9$ at $x = -2$

$f(-2) = 11$

6) $f(x) = 5(x - 3)(x - 2)$ at $x = 9$

$f(9) = 210$

7) $f(x) = 2(x + 3)^2 - 5$ at $x = 3$

$f(3) = 67$

8) $f(x) = 2x^2 + 7$ at $x = 0$

$f(0) = 7$

9) $f(x) = (-x + 2)(x - 15)$ at $x = -10$

$f(-10) = -300$

10) $f(x) = -x^2 + 7x + 10$ at $x = -8$

$f(-8) = -110$