

Name: _____

Evaluating Quadratic Functions

T1ES1

A) Evaluate each function at the specified value.

1) $f(x) = (x + 3)^2 - 2x^2$; $x = -12$

2) $f(x) = -5x + 4x^2$; $x = -6$

B) Evaluate each function.

1) $f(x) = (3x - 14)^2$; find $f(11)$

2) $f(x) = -x^2$; find $f(-5)$

C) If $f(x) = x^2 - 7x - 13$; find the following.

1) $f(-15) =$ _____

2) $f(12) =$ _____

3) $f(0) =$ _____

4) $f(6) =$ _____

D) If $f(x) = (x - 2)^2$; find the following.

1) $4f(1) \times 6f(0) =$ _____

2) $-8f(2) + 3f(4) =$ _____

3) $-7f(7) + f(-8) =$ _____

4) $\frac{-3f(-1)}{f(3)} =$ _____

E) What is the value of $f(-3)$, if $f(x) = 10x^2 + 8$?

i) 91

ii) -88

iii) -96

iv) 98

Evaluating Quadratic Functions

A) Evaluate each function at the specified value.

1) $f(x) = (x + 3)^2 - 2x^2$; $x = -12$

-207

2) $f(x) = -5x + 4x^2$; $x = -6$

174

B) Evaluate each function.

1) $f(x) = (3x - 14)^2$; find $f(11)$

361

2) $f(x) = -x^2$; find $f(-5)$

-25C) If $f(x) = x^2 - 7x - 13$; find the following.

1) $f(-15) =$ **317**

2) $f(12) =$ **47**

3) $f(0) =$ **-13**

4) $f(6) =$ **-19**

D) If $f(x) = (x - 2)^2$; find the following.

1) $4f(1) \times 6f(0) =$ **96**

2) $-8f(2) + 3f(4) =$ **12**

3) $-7f(7) + f(-8) =$ **-75**

4) $\frac{-3f(-1)}{f(3)} =$ **-27**

E) What is the value of $f(-3)$, if $f(x) = 10x^2 + 8$?

i) 91

ii) -88

iii) -96

iv) 98