Name : _____ Score : _____

Vertex Form

Sheet 1

Write each quadratic function in vertex form.

1) $f(x) = (x - 8)(x + 2)$

2) $f(x) = -3x^2 + 24x - 41$

3) $f(x) = 6x^2 - 12x - 13$

4) $f(x) = -8(x + 1)(x - 2)$

5) $f(x) = 4(x - 12)(x + 7)$

6) $f(x) = 5x^2 + 6x - 8$

7) $f(x) = 7x^2 + 28x - 25$

8) $f(x) = (5x - 3)(5x - 1)$

9) $f(x) = 2(3x - 3)(x + 5)$

10) $f(x) = 2x^2 + 9x + 10$

Name : _____ **Answer key** Score : _____

Vertex Form

Sheet 1

Write each quadratic function in vertex form.

1) $f(x) = (x - 8)(x + 2)$

$f(x) = (x - 3)^2 - 25$

2) $f(x) = -3x^2 + 24x - 41$

$f(x) = -3(x - 4)^2 + 7$

3) $f(x) = 6x^2 - 12x - 13$

$f(x) = 6(x - 1)^2 - 19$

4) $f(x) = -8(x + 1)(x - 2)$

$f(x) = -8\left(x - \frac{1}{2}\right)^2 + 18$

5) $f(x) = 4(x - 12)(x + 7)$

$f(x) = 4\left(x - \frac{5}{2}\right)^2 - 361$

6) $f(x) = 5x^2 + 6x - 8$

$f(x) = 5\left(x + \frac{3}{5}\right)^2 - \frac{49}{5}$

7) $f(x) = 7x^2 + 28x - 25$

$f(x) = 7(x + 2)^2 - 53$

8) $f(x) = (5x - 3)(5x - 1)$

$f(x) = 25\left(x - \frac{2}{5}\right)^2 - 1$

9) $f(x) = 2(3x - 3)(x + 5)$

$f(x) = 6(x + 2)^2 - 54$

10) $f(x) = 2x^2 + 9x + 10$

$f(x) = 2\left(x + \frac{9}{4}\right)^2 - \frac{1}{8}$