

## 5.7 Switching Forms

Date\_\_\_\_\_ Period\_\_\_\_

**Write each equation in intercept form.**

1)  $y = -2x^2 + 16x - 30$

2)  $y = x^2 + 6x + 5$

3)  $y = -2x^2 + 8x - 6$

4)  $y = -(x - 2)^2 + 4$

5)  $y = (x + 4)^2 - 4$

6)  $y = (x - 4)^2 - 4$

**Write each equation in standard form.**

7)  $y = 3(x + 2)(x - 4)$

8)  $y = -2(x + 7)(x - 1)$

$$9) \ y = -x(x + 5)$$

$$10) \ y = (x + 2)^2 - 1$$

$$11) \ y = 2(x + 1)^2 + 1$$

$$12) \ y = -2(x + 3)^2 + 4$$

**Write each equation in vertex form.**

$$13) \ y = x^2 + 4x + 2$$

$$14) \ y = -2x^2 - 16x - 36$$

$$15) \ y = -x^2 - 8x - 17$$

$$16) \ y = (x - 1)(x + 5)$$

$$17) \ y = 2(x + 6)(x - 3)$$

$$18) \ y = -(x - 2)(x - 8)$$