

## 4.2 Worksheet

### Intermediate Algebra

Name \_\_\_\_\_

**Learning Target:** I can translate quadratic equations from factored and vertex form INTO standard form.

Level 1

#### Multiply

$$1. \quad 3x(x - 4)$$

$$2. \quad -2x^2(4x^3 + 3x - 2)$$

$$3. \quad (2x + 1)(x - 3)$$

**Write each equation in standard form.**

$$5. \quad y = (x + 4)(x + 1)$$

$$6. \quad y = -2(x - 2)(x + 6)$$

$$7. \quad y = (x - 4)^2$$

$$8. \quad y = (4x - 7)^2$$

$$9. \quad y = 4(x - 2)^2 + 4$$

$$10. \quad y = -(x - 6)^2 - 12$$

Level 2

**Find the x-intercepts of each function.**

$$11. \quad y = (2x + 12)(x - 3)$$

$$12. \quad y = (4x + 16)(3x - 1)$$

**Given the following x-intercepts, write a quadratic function in standard form.**

$$13. \quad (4, 0) (-6, 0)$$

$$14. \quad (-2, 0) (-10, 0)$$