

Answers to 4.3 Writing Quadratic Equations

$$1) y = \frac{1}{3}(x-2)(x+4) \quad 3) y = -\frac{1}{8}(x+1)^2 + 9 \quad 5) y = \frac{2}{225}(x-300)^2$$

$$7) y = \frac{1}{300}(x-30)^2 - 3 \text{ or} \quad 9) y = -\frac{1}{5}x(x-7) \quad 11) \text{ b. 16 feet}$$
$$y = \frac{1}{300}(x-30)^2 + 57 \text{ or} \quad \text{c. 4 seconds}$$
$$y = \frac{1}{300}x(x-60) \quad \text{d. 15 feet, 12 feet}$$
$$\quad \quad \quad \text{e. 8 seconds}$$
$$\quad \quad \quad \text{f. D: } [0,8] \quad \text{R: } [0,16]$$