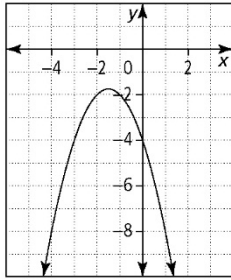
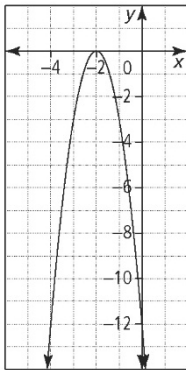


BLM 4-4 Section 4.1 Extra Practice

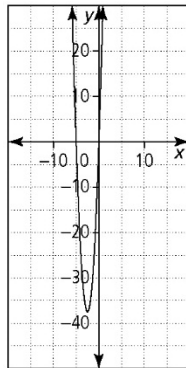
1. a) 2 b) none c) 2 d) 1
 2. a) -3, 2 b) no real roots c) -8.2, 1.2 d) 3
 3. a) no solution



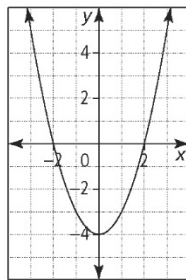
b) -2



c) 0, -5



d) 2, -2



4. a) 1.1, -3.5 b) -3.9, 3.9 c) no solution d) -2.8, 1.8
 5. Example:
 a) -10, 15

- b) -20, 20
 c) -0.7, 0.1
 d) no solution
 6. a) $m = 16$ b) $m < 16$ c) $m > 16$
 7. 4.5 s
 8. 5 cm, 12 cm, 13 cm

BLM 4-5 Section 4.2 Extra Practice

1. a) $(x+4)(x-5)$ b) $3(x-3)(x-7)$
 c) $-4(x+1)(x+2)$ d) $\frac{1}{2}(x+3)(x-4)$
 2. a) $(2x-1)(7x+5)$ b) $(x+5)(3x-4)$
 c) $(4x+3y)(x+y)$ d) $(2x-3)(3x-4)$
 3. a) $4(3x+2y)(x-y)$ b) $3y(2x+5)(x+2)$
 c) $10(7x-5y)(2x-5y)$ d) $7x(3x+y)(2x+3y)$
 4. a) $(x-7y)(x+7y)$ b) $(5x-3)(5x+3)$
 c) $\left(x+\frac{5}{2}y\right)\left(x-\frac{5}{2}y\right)$ or $\frac{1}{4}(2x+5y)(2x-5y)$
 d) $16(x-3)$
 5. a) $(x+4)(x-8)$ b) $(6x+7)(4x-3)$
 c) $2(7x+4)(7x-3)$ d) $(2x^2+3)(x^2-3)$
 6. a) -3, 5 b) 4, -8 c) 3, 6 d) $\pm\sqrt{5}$
 7. a) $-\frac{1}{2}, \frac{4}{3}$ b) 5, $-\frac{1}{7}$ c) $-\frac{1}{5}, 2$ d) $\frac{3}{2}, -6$
 8. a) $\frac{13}{8}, -\frac{13}{8}$ b) $\frac{7}{3}, -\frac{7}{3}$ c) $\frac{1}{4}, -\frac{1}{4}$ d) 8, -10
 9. a) $-1, \frac{2}{3}$ b) $\frac{1}{2}, 4$ c) $-\frac{1}{3}, \frac{1}{2}$ d) 6, $-\frac{7}{2}$
 10. a) $-\frac{1}{3}$ b) $\frac{3}{2}$ c) $-\frac{5}{2}$ d) $\frac{4}{7}$

BLM 4-6 Section 4.3 Extra Practice

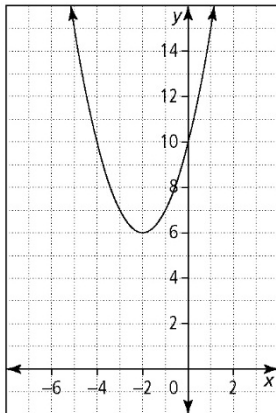
1. a) 36 b) 100 c) $\frac{49}{4}$ d) $\frac{4}{25}$
 2. a) $(x+3)^2 = 5$ b) $(x-4)^2 = 11$ c) $\left(x-\frac{5}{2}\right)^2 = \frac{67}{12}$
 d) $(x+5)^2 = 33$
 3. a) -1, 9 b) 0, -1 c) 0.9, -0.7 d) -7.5, -6.5
 4. a) $-1 \pm \sqrt{3}$ b) $\frac{5 \pm \sqrt{13}}{2}$ c) 0.2, -0.8 d) $\frac{3}{7}$
 5. a) $\frac{3}{4}, -1$ b) $-1 \pm \frac{2}{\sqrt{3}}$ c) $-2 \pm 2\sqrt{6}$ d) 1, 5
 6. a) -0.21, 4.71 b) -0.26, 1.26 c) -9.47, -0.53
 d) -0.88, 0.38
 7. 6, 16

BLM 4-7 Section 4.4 Extra Practice

1. a) two real roots b) no real roots c) one real root
 d) no real roots
 2. a) none b) 1 c) 2 d) 2
 3. a) $5 \pm \sqrt{2}$ b) $\frac{7 \pm \sqrt{3}}{2}$ c) $\frac{2}{3}$ d) $0, \frac{3}{2}$
 4. a) 0.50, 0.33 b) no solution c) -0.59, 2.26
 d) -4.46, 1.12

5. a) $-2 \pm \sqrt{5}$ b) $\frac{1 \pm 2\sqrt{2}}{2}$ c) $\frac{-5 \pm \sqrt{3}}{4}$ d) $2 \pm \sqrt{7}$

6. a) No solution;



b) 0, -7; Factor method: can be factored quickly because x is a common factor

c) $-\frac{5}{2}$; Factor method: a perfect square trinomial

d) $-4 \pm \sqrt{3}$; Complete the square method: already in the form $(x + a)^2 = b$

e) $\frac{-1 \pm \sqrt{7}}{6}$; Quadratic formula: exact values are required for the answer

7. a) -3 b) $-\frac{1}{2}$

BLM 4-8 Chapter 4 Review #22

$$ax^2 + bx = -c$$

$$x^2 + \frac{b}{a}x = -\frac{c}{a}$$

$$x^2 + \frac{b}{a}x + \frac{b^2}{4a^2} = \frac{b^2}{4a^2} - \frac{c}{a}$$

$$\left(x + \frac{b}{2a}\right)^2 = \frac{b^2 - 4ac}{4a^2}$$

$$x + \frac{b}{2a} = \pm \sqrt{\frac{b^2 - 4ac}{4a^2}}$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Subtract c from both sides.

Divide both sides by a .

Complete the square.

Factor the perfect square trinomial.

Take the square root of both sides.

Solve for x .