Section 1.4

Video 1

Solve by using the Zero-Factor Property.

1) $(2x-7)(x+6)=0$

2) $x(3x+4)(5x-10)=0$

Video 2

Solve by using the Square Root Property.

3) $x^2 = 18$

4) $x^2 = -25$

5) $(x-4)^2 - 15 = 13$

Video 3

Solve by completing the square.

6) $x^2 + 8x - 20 = 0$ 7) $x^2 - 5x + 19 = 0$

8) $4x^2 + 6x + 5 = 0$

Video 4

Solve by using the quadratic formula.

9) $x^2 + 8x - 20 = 0$

10) $x^2 - 5x + 19 = 0$

11) $4x^2 + 6x + 5 = 0$

Video 5

Solve by factoring and using the quadratic formula.

12) $x^3 - 125 = 0$

Video 6

Solve for *y*.

13) $2my^2 - ny = 3p$ $(m \neq 0)$

Video 7

Evaluate the discriminant for each equation. Use the discriminant to determine the number and type of solutions.

14) $x^2 + 4x - 10 = 0$

15) $9x^2 + 30x + 25 = 0$

16) $6x^2 - 19x + 10 = 0$

17) $2x^2 + 5x + 20 = 0$