

## Practice Assignment #20

Solve each equation by taking square roots. Leave your answer in simplest (radical) form, if necessary.

1)  $8p^2 + 10 = 42$

$\{2, -2\}$

2)  $8x^2 - 9 = 191$

$\{5, -5\}$

3)  $2r^2 + 2 = 130$

$\{8, -8\}$

4)  $2b^2 - 4 = 14$

$\{3, -3\}$

5)  $64n^2 - 6 = -2$

$\left\{\frac{1}{4}, -\frac{1}{4}\right\}$

6)  $3x^2 + 2 = 302$

$\{10, -10\}$

$$7) 5x^2 + 6 = 51$$

$$\{3, -3\}$$

$$8) 10n^2 - 7 = 633$$

$$\{8, -8\}$$

$$9) 5x^2 + 6 = 251$$

$$\{7, -7\}$$

$$10) 4v^2 - 1 = 35$$

$$\{3, -3\}$$

**Solve each equation by factoring.**

$$11) m^2 + 4m + 3 = 0$$

$$\{-1, -3\}$$

$$12) a^2 - 15a + 54 = 0$$

$$\{9, 6\}$$

$$13) 6a^2 - 30a - 36 = 0$$

$$\{-1, 6\}$$

$$14) 2x^2 - 14x + 24 = 0$$

$$\{4, 3\}$$

$$15) b^2 + 5 = 6b$$

$$\{5, 1\}$$

$$16) v^2 - 8v + 70 = 9v$$

$$\{10, 7\}$$

$$17) 7n^2 + 51n = -3n - 35$$

$$\left\{-\frac{5}{7}, -7\right\}$$

$$18) 16a^2 + 32a = 64 - 5a^2$$

$$\left\{\frac{8}{7}, -\frac{8}{3}\right\}$$

$$19) (v + 7)(8v + 3) = 0$$

$$\left\{-7, -\frac{3}{8}\right\}$$

$$20) (3n - 4)(n - 8) = 0$$

$$\left\{\frac{4}{3}, 8\right\}$$