



N:

D: P: 1 2 3 4 5 6

### Solving Quadratics // Practice 4

A. Simplify the following square roots:

1)  $\sqrt{8}$

2)  $\sqrt{12}$

3)  $\sqrt{32}$

4)  $\sqrt{40}$

5)  $\sqrt{20}$

B. Solve each quadratic equation by using square roots or by factoring.

1)  $2x^2 = 32$

2)  $3x^2 = 27$

3)  $x^2 - 4x - 12 = 0$

4)  $3x^2 - 15x - 72 = 0$

5)  $4x^2 - 5 = 9$

6)  $x^2 + 7x + 12 = 0$

7)  $\frac{1}{2}x^2 - 5 = 13$

8)  $x^2 + 4x = -3$

9)  $x^2 + 8x + 16 = 0$

10)  $x^2 = 5x$

11)  $-x^2 + 9 = 2x^2 - 6$

12)  $\frac{2}{3}x^2 = 6$

$$13) x^2 - x - 6 = 0$$

$$14) 3x^2 - 7 = 2(x^2 + 3)$$

$$15) \frac{2}{3}x^2 + 6 = 18$$

$$16) x^2 - 2x = 48$$

$$17) \frac{1}{3}x^2 = 4$$

$$18) 9x^2 = 9$$

$$19) x^2 + 14x = 33$$

$$20) x^2 = -9x - 14$$

$$21) 2x^2 + 11x = -12$$

$$22) 3x^2 = 6x$$

$$23) 5x^2 + 10x = 40$$

$$24) x^2 + 100 = 0$$