

AA PREP—SOLVING QUADRATIC EQUATIONS LECTURE

Methods for Solving Quadratic Equations:

- 1) Taking Square Root
- 2) Factoring
- 3) Quadratic Formula
- 4) Complete the Square

Solve each quadratic equation using the specified method. Simplify radicals!

EX 1: Solve by taking the square root.

a) $x^2 = 50$

b) $\frac{2}{3}(x-1)^2 + 5 = 17$

EX 2: Solve by factoring.

a) $4x^2 - 25 = 0$

b) $-x^2 - x + 72 = 0$

EX 3: Solve using quadratic formula.

a) $x^2 - 2x - 8 = 0$

b) $x^2 + 6x - 4 = 0$

EX 4: Solve by completing the square.

a) $x^2 - 8x - 12 = 0$

b) $4x^2 + 24x - 9 = 0$