

Unit 3: Quadratic Equations**Interlude: Simplifying Radicals**

Ex. Simplify each radical:

1. $\sqrt{25}$

$$= 5$$

3. $\sqrt{27}$

$$= \sqrt{9} \times \sqrt{3}$$

$$= 3\sqrt{3}$$

5. $\sqrt{81}$

$$= 9$$

*look out for perfect squares

2. $\sqrt{40}$

$$= \sqrt{4} \times \sqrt{10}$$

$$= 2\sqrt{10}$$

4. $\sqrt{10}$

$$= \sqrt{10}$$

*some can't be simplified

6. $6\sqrt{12}$

$$= 6 \times \sqrt{4} \times \sqrt{3}$$

$$= 6 \times 2\sqrt{3}$$

$$= 12\sqrt{3}$$