## **11.2:** Simplifying Radicals (reg)

Goals: \*Simplify radicals using the product property \*Multiply radicals \*Simplify radicals using the quotient property \*Rationalize the denominator

## **Radicals are simplest form when:**

1.

2.

3.

## **Properties of Radicals**

**Product Property:** 

**Quotient Property:** 

Simplify:

Ex:  $\sqrt{32}$ 

**Ex:**  $\sqrt{9x^2}$ 

Ex:  $\sqrt{24}$ 

**Ex:**  $\sqrt{3x} \cdot 4\sqrt{x}$ 

**Ex:**  $\sqrt{7} \cdot \sqrt{7}$ 

**Ex:**  $3\sqrt{b} \cdot \sqrt{2b^3}$ 

**Ex:**  $2\sqrt{mn^2} \cdot \sqrt{5m}$ 

Simplify:

**Ex:**  $\sqrt{\frac{16}{25}}$ 

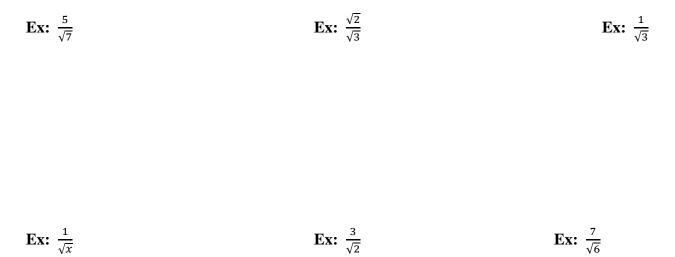
**Ex:**  $\sqrt{\frac{13}{100}}$ 



Ex:  $\sqrt{\frac{5}{49}}$ 

**Ex:**  $\sqrt{\frac{11}{d^4}}$ 

**Rationalizing the denominator:** 



**Ex:**  $\frac{\sqrt{3}}{\sqrt{5}}$