

BE-1B MONDAY 2-4-08

WATCH OUT FOR THE 2 "special cases"

① Solve
$$\begin{cases} 2x + 3y = 5 \\ -4x - 6y = 6 \end{cases}$$

② Solve
$$\begin{cases} x + 2y = 5 \\ 3x - 15 = -6y \end{cases}$$

③ Factor $64x^2 - 1$

④ Factor $9x^6 - 4y^2$

~~~~~ ANSWER WB ~~~~~

- ① Pg 41 #5  
② Pg 41 #6
- }

# Ch 11-1 Simplifying Radicals

$\sqrt{\quad}$  radical symbol

\* You can split or combine products under the radical

$$\begin{aligned} \text{Ex) } \sqrt{400} &= \sqrt{4 \cdot 100} = \sqrt{4} \cdot \sqrt{100} \\ &= 2 \cdot 10 = 20 \end{aligned}$$

$$\boxed{\sqrt{400} = 20} \quad \checkmark$$

$$\begin{aligned} \text{Ex) } \sqrt{12} &= \sqrt{4 \cdot 3} = \sqrt{4} \cdot \sqrt{3} \\ \sqrt{12} &= 2\sqrt{3} \end{aligned}$$



Never Leave  
A perfect  
Square under  
the radical

$$\begin{array}{c} \uparrow \\ \underline{\underline{3.46}} \end{array}$$

$$\begin{array}{c} \uparrow \\ 2(1.732) \\ \text{"} \\ \underline{\underline{3.46}} \end{array}$$

$$\text{Ex) } \sqrt{90} = \sqrt{9} \sqrt{10}$$

$$3\sqrt{10} \quad \text{decimal?}$$

$$\text{Simplify } \sqrt{40x^4}$$

$$\sqrt{4} \sqrt{10} \sqrt{x^2} \sqrt{x^2}$$

↙ perfect square

$$2x^2 \sqrt{10}$$

Ch. 11-2 Add/Subtract/Multiply Radicals

Ex)

$$4\sqrt{3} + 6\sqrt{3} = 10\sqrt{3}$$

$$4\sqrt{3} + 2\sqrt{2} = 4\sqrt{3} + 2\sqrt{2}$$

- Return homework
- Graded Exam 1
- Read Ch 11-1 and 11-2

Compare:

when  $x=0$ ,  $b$  is = to  $y$ , it is the  $y$  intercept

$$y = mx + b$$

or  $y = ax + b$

↑  
SLOPE =  $\frac{\text{rise}}{\text{run}}$   
+ ↗ or - ↘

ex)  $y = 2x + 4$

$$y = ax^2 + bx + c$$

$a + \curvearrowright$   
 $a - \curvearrowleft$

$$\text{AOS} \Rightarrow x = -\frac{b}{2a}$$

when  $x = 0$ ,  $c$  is the  $y$  intercept

ex)  $y = 2x^2 - 4x - 6$

• USA Test Prep Demo