

May 1, 2012

Alq1

Get out your homework



17)

$$35b^4 + 50b^2 - 30b + 20$$
$$= 5(7b^4 + 10b^2 - 6b + 4)$$

5/1 - Solving Quadratic Equations

x^2

If $A \cdot B = 0$, what do you know about A and B ?

*Either A or B has to be zero.
or both*

$$A \cdot B = 0$$

$$(x + 8)(x + 1) = 0$$

$$\begin{array}{l} x + 8 = 0 \\ -8 \quad -8 \\ x = -8 \end{array}$$

$$\begin{array}{l} x + 1 = 0 \\ -1 \quad -1 \\ x = -1 \end{array}$$

$$x = \{-8, -1\}$$

$$(a - 5)(a - 4) = 0$$

$$\begin{array}{l|l} a - 5 = 0 & a - 4 = 0 \\ +5 \quad +5 & +4 \quad +4 \\ a = 5 & a = 4 \end{array}$$

$$a = \{5, 4\}$$

$$(n - 5)(n + 3) = 0$$

$$\begin{array}{l|l} n - 5 = 0 & n + 3 = 0 \\ +5 \quad +5 & -3 \quad -3 \\ n = 5 & n = -3 \end{array}$$

$$n = \{5, -3\}$$

$$(n-1)(4n+3)=0$$

$$\begin{array}{l} n-1=0 \\ +1 \quad +1 \end{array}$$

$$n=1$$

$$\begin{array}{l} 4n+3=0 \\ -3 \quad -3 \end{array}$$

$$\begin{array}{l} \cancel{4}n = -3 \\ \cancel{4} \quad \cancel{4} \\ n = -\frac{3}{4} \end{array}$$

$$n = \left\{ 1, -\frac{3}{4} \right\}$$

$$(r-4)(3r-7)=0$$

$$\begin{array}{l} r-4=0 \\ +4 \quad +4 \end{array}$$

$$r=4$$

$$\begin{array}{l} 3r-7=0 \\ +7 \quad +7 \end{array}$$

$$\frac{3r}{3} = \frac{7}{3}$$

$$r = 2\frac{1}{3}$$

$$r = \left\{ 4, 2\frac{1}{3} \right\}$$

$$(5r + 3)(6r + 1) = 0$$

$$\begin{array}{l|l} 5r + 3 = 0 & 6r + 1 = 0 \\ -3 \rightarrow & -1 \rightarrow \\ \frac{5r}{5} = \frac{-3}{5} & \frac{6r}{6} = \frac{-1}{6} \\ r = -\frac{3}{5} & r = -\frac{1}{6} \end{array}$$

$$r = \left\{ -\frac{3}{5}, -\frac{1}{6} \right\}$$

$$x^2 + 3x - 10 = 0$$

$$(x-2)(x+5) = 0$$

$$\begin{array}{l|l} x-2=0 & x+5=0 \\ +2 \quad +2 & -5 \quad -5 \\ \hline x=2 & x=-5 \end{array}$$

$$x = \{2, -5\}$$

$$n^2 - 16n + 48 = 0$$

$$(n-12)(n-4) = 0$$

$$\begin{array}{l|l} n-12=0 & n-4=0 \\ n=12 & n=4 \end{array}$$

$$n = \{12, 4\}$$

Homework

Yellow *Miscellaneous WS2*

Due Wednesday