

## Bell Work

4/8/2015

You may need to look at your notes from yesterday

Find the roots of the following when  $y=0$ .

$$y = (2x - 4)(x + 5)$$

$$0 = (2x - 4)(x + 5)$$

$$2x - 4 = 0$$

$$+4 \quad +4$$

$$\frac{2x}{2} = \frac{4}{2}$$

$$x = 2$$

$$y = 0$$

$$(2, 0)$$

$$x + 5 = 0$$

$$-5 \quad -5$$

$$x = -5$$

$$y = 0$$

$$(-5, 0)$$

X-intercepts  
b/c  $y=0$

Roots

Notes from yesterday....what did we cover?

Solve the following using the zero product property

(you may have to find the GCF first)

$$a^2 + 5a = 0$$

$a(a + 5) = 0$

$a = 0$        $a + 5 = 0$   
 $-5$        $-5$

$a = -5$

$y = 0$

$(0, 0)$        $y = 0$   
 $(-5, 0)$

*Roots*      *x-intercepts*

The handwritten solution shows the equation  $a^2 + 5a = 0$  being factored into  $a(a + 5) = 0$ . A green bracket under  $a$  points to  $a = 0$ , and another green bracket under  $(a + 5)$  points to  $a + 5 = 0$ . The second equation is solved to give  $a = -5$ . Below,  $y = 0$  is written, and the points  $(0, 0)$  and  $(-5, 0)$  are circled in green. Red arrows labeled "Roots" point from the factored equation to the solutions, and red arrows labeled "x-intercepts" point to the circled points.

Solve the following using the zero product property

(you may have to find the GCF first)

$$3s^2 - 9s = 0$$
$$3s(s - 3) = 0$$

Roots

$3s = 0$   
 $\frac{3}{3} \frac{s}{3} = 0$   
 $s = 0$   
 $y = 0$

$s - 3 = 0$   
 $+3 \quad +3$   
 $s = 3$   
 $y = 0$

x-ints

$(0, 0)$

$(3, 0)$

9.4 B

1-33

ODD

