Any questions from last day's homework??

p. 281 #1ab, 2ab, 3ab, 4, 5ab, 6

Please submit the homework below:

Thurs. Nov. 9	**C2D5 Factor Practice**	**Worksheet #1-28**

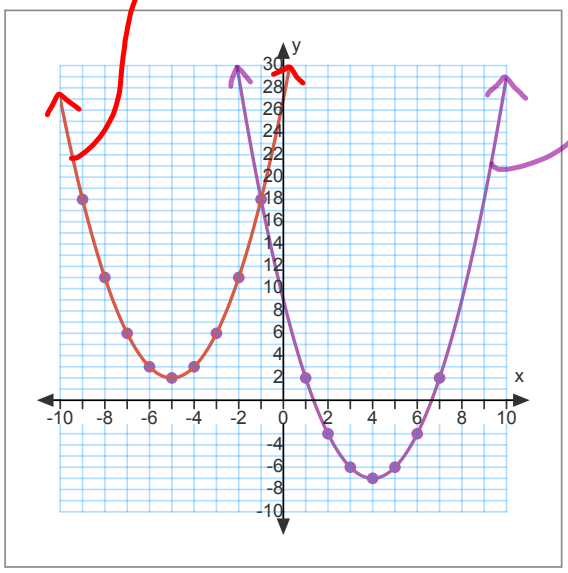
Warm-up: State the vertex, then graph.

a) $y=(x-4)^2-7$

Vertex (4 ,-7)

b) $y=(x+5)^2+2$

Vertex (-5 , 2)



Cycle 3 Day 1 MBF 3CI CHAPTERS 4, 5, 7: RELATIONS

Date: NOV.14/17

LEARNING TARGET:

"I can graph a quadratic relation given in standard form by: factoring, then finding the zeros, the equation of the axis of symmetry, and then finally the vertex for the parabola".

Graphing Quadratics from Standard Form

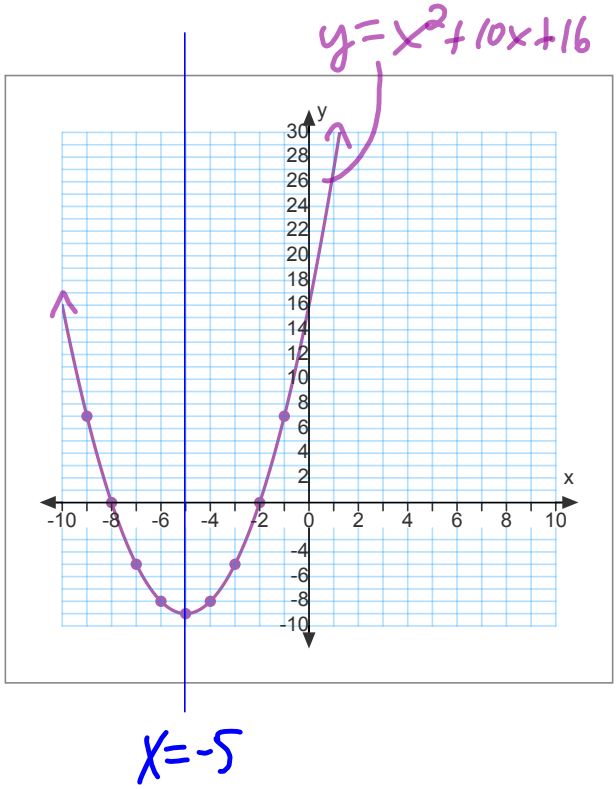
$y = x^2 + 10x + 16$

Ex.1 Given $\mathbf{y = x^2 + 10x + 16}$.

a) Convert the equation from standard form to intercept form (by factoring).

$y = x^2 + 10x + 16$

$= (x + 2)(x + 8)$



b) Find the zeros (*x*-intercepts).

A·B=0

A=0 or B=0

$y = (x+2)(x+8)$

$0 = (x+2)(x+8)$

$x+2=0$ or $x+8=0$

$x=-2$ $x=-8$

c) Determine the equation of the axis of symmetry.

AoS: $x = \frac{-2+(-8)}{2}$

$= \frac{-10}{2}$

$= -5$

$x=-5$

d) Determine the coordinates of the vertex (using substitution).

$y = (x+2)(x+8)$

$= ((-5)+2)((-5)+8)$

$= (-3)(3)$

$= -9$

$\therefore$ vertex $(-5, -9)$

e) Graph the parabola (using the vertex and the step pattern).

Today's Entertainment: PRACTICE

1. Given each equation in standard form, (use the 5 steps on the preceding page to) determine the coordinates of the vertex, then graph each.

a) $y = x^2 + 4x - 5$

$y = x^2 - 4x + 4$

Vertex (,)

Vertex (,)