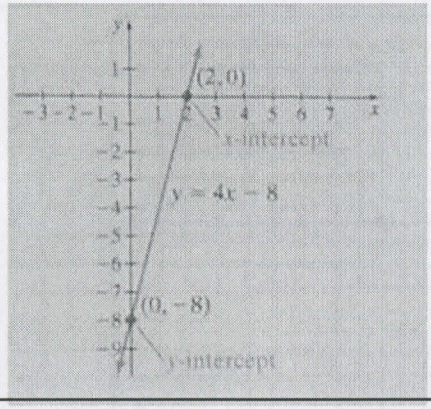
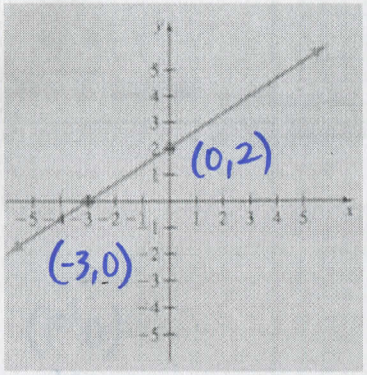
Lesson Title 3.3 Intercepts NOTES **B2A2** **Date** _____

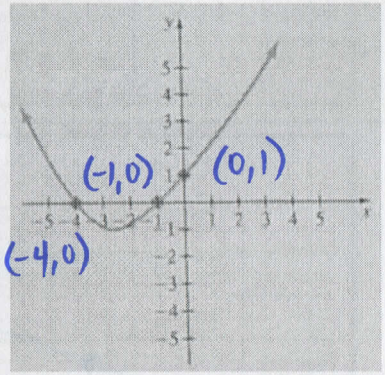
OBJECTIVE 1: Identifying Intercepts

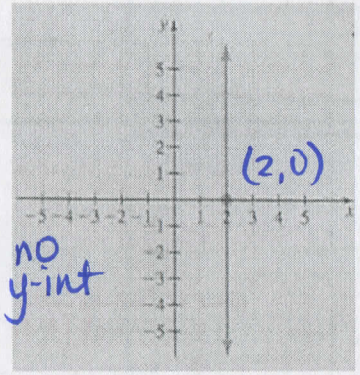
- *One way to graph equations is by their intercepts.*
- *Intercepts are the POINT where the graph crosses the axis.*
- *Intercepts are always in coordinate form.*
- *For the y-intercept, b, the x value is always 0.*
- *For the x-intercept, the y value is always 0.*
- *These two points create a line.*

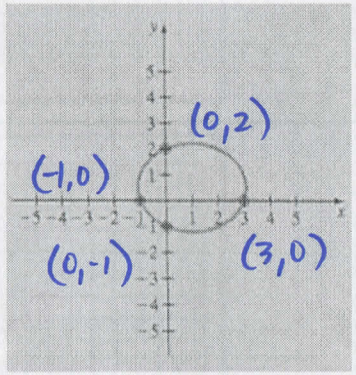


TASK 1: Identify the x- and y-intercept. Write your answer in coordinate form









OBJECTIVE 2: Using Intercepts to Graph a Linear Equation

Remember when finding an intercept, plug 0 into the other variable. Especially when the equation is in Standard form Ax + By = C.

OBJECTIVE 3: Graphing Vertical & Horizontal Lines

x = c means c is a number and the line will be vertical and go through the x-axis at c.

y = c means c is a number and the line will be horizontal and go through the y-axis at c.

Task 2: Graph by finding & plotting intercepts.

a) $x - 3y = 6$

$0 - 3y = 6$

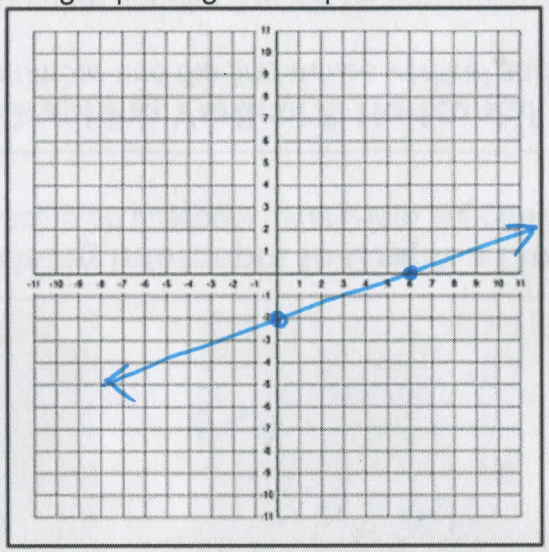
$y = -2$

$(0, -2)$

$x - 3(0) = 6$

$x = 6$

$(6, 0)$



b) $x + 2y = -4$

$0 + 2y = -4$

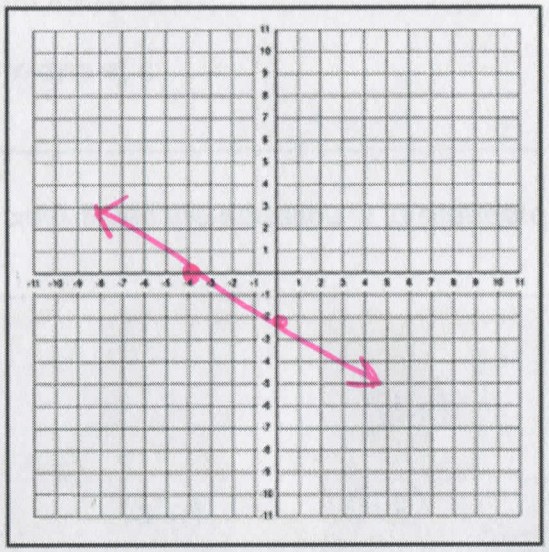
$y = -2$

$(0, -2)$

$x + 2(0) = -4$

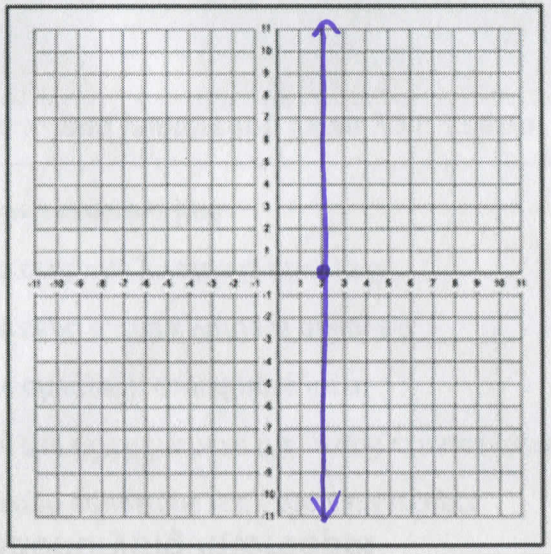
$x = -4$

$(-4, 0)$

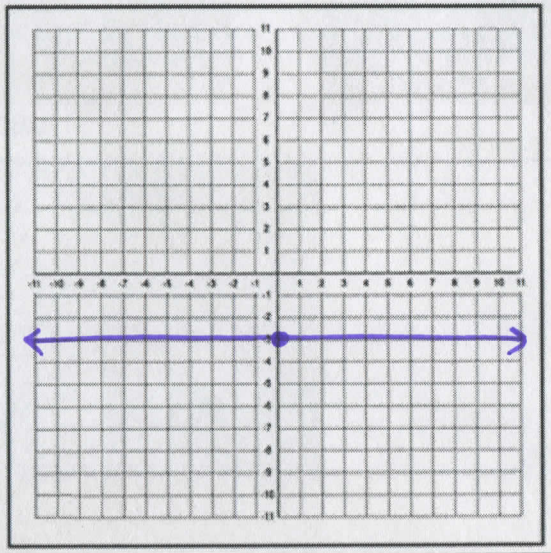


Task 3: Graph

a) $x = 2$



b) $y = -3$



Still need help with: