Math 9 HW Section 4.3 Graphing Lines in the form of Ax+By=C

1. Given each equation below, find the "X" and "Y" intercepts:

a) $2x + 3y = 6$		b) $4x + 5y = 10$		c) $4y - 3x = 24$	
x –Intercept :	y-Intercept:	x –Intercept :	y-Intercept:	x –Intercept :	y-Intercept:
d) $3x - 4y = -12$		e) $2y - 3x = \frac{5}{2}$		f) $x - y = 2x - 4$	
x –Intercept :	y-Intercept:	x –Intercept :	y-Intercept:	x –Intercept :	y-Intercept:
g) $y = 3x - 4$		h) $\frac{3}{2}x + 0.25y = 1$	2	i) $\frac{y-2x}{3} = 1$	
x –Intercept :	y-Intercept:	x –Intercept :	y-Intercept:	x –Intercept :	y-Intercept:

- 2. Explain why the y-coordinate is zero when we are looking at the x-intercept:
- 3. Explain why the x-coordinate is zero when we are looking at the y-intercept:
- 4. Jack is taking the taxi and the cost "C" is given by the function: C = 2.5x + 4, where "x" the distance travelled in km. What does the y-intercept represent in this function?
- 5. Given each of the following line equations, which one has the largest y-intercept?

i)
$$2x+4y=12$$
, ii) $3y-3=12x$, iii) $3x-y=15$, iv) $y=3x-8$

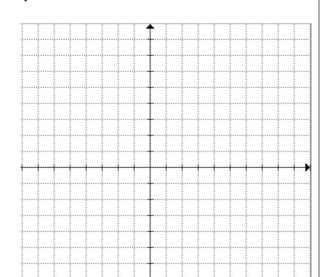
ii)
$$3y - 3 = 12x$$

iii)
$$3x - y = 15$$

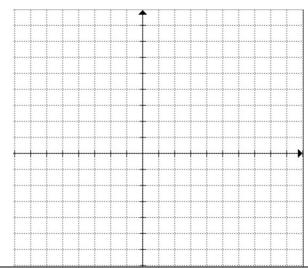
iv)
$$y = 3x - 8$$

6. Given the following equation, draw the graph with the grid provided. Label the coordinates of the intercepts:

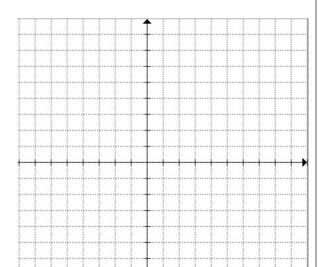
A) 2x + 3y = 6



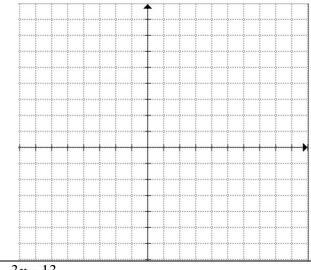
b) x + 2y = 8



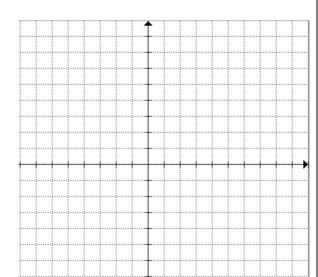
c) 4y - 3x = 12



d) 5x - 4y = -20



e) 1.25x - 5y = 10



f) 4y - 3x = 13

