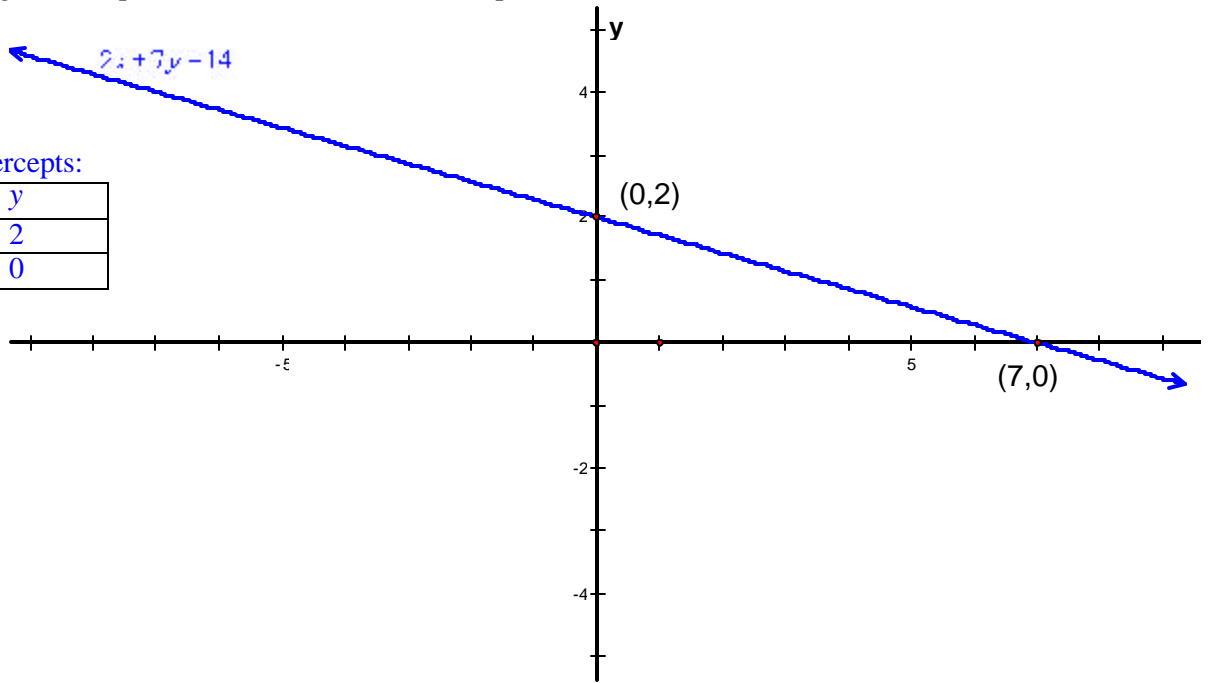## QUIZ #2 @ 20 points
Sections 3.2 & 3.3

Write neatly. Use a pencil. Label the axes and the points used. Show work in order to get credit. No proof, no credit given.

1. Graph the following linear equations. Label the axes and the points used.
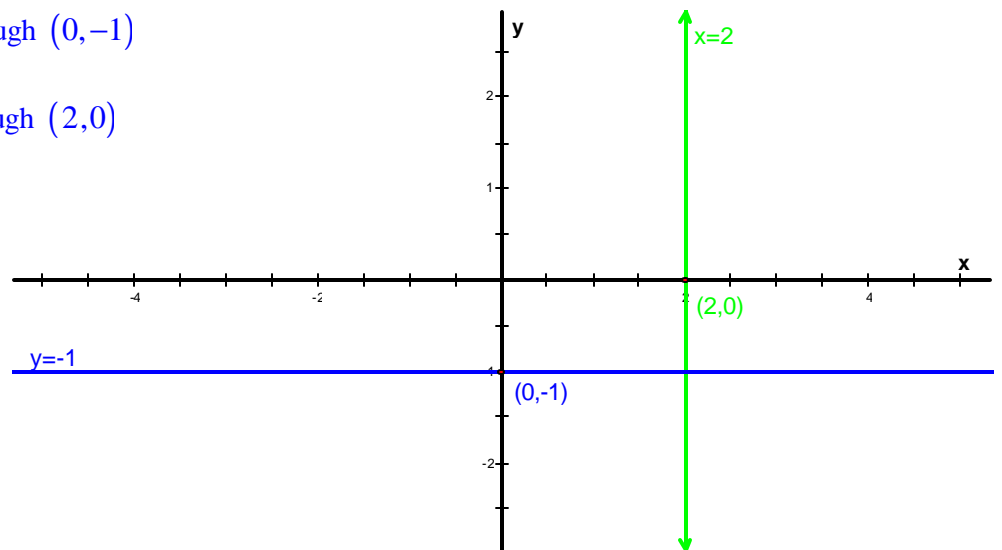
a) $2x + 7y = 14$

Find the x- and y-intercepts:

x	y
0	2
7	0

$2x + 7y = 14$

(0,2)

(7,0)

b) $y + 1 = 0$

$y = -1$ - horizontal line passing through $(0,-1)$

c) $x = 2$ - vertical line passing through $(2,0)$

x=2

(2,0)

y=-1

(0,-1)

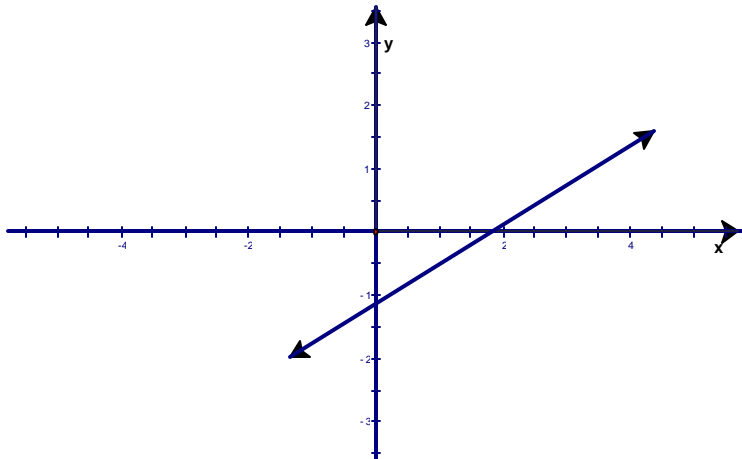2. Find the slope of the line passing through $(1,-2)$ and $(-3,-7)$.

$$m = \frac{\triangle y}{\triangle x} = \frac{-2-(-7)}{1-(-3)} = \frac{-2+7}{1+3} = \frac{5}{4}$$

$$m = \frac{5}{4}$$

3. For each of the graphs below decide whether

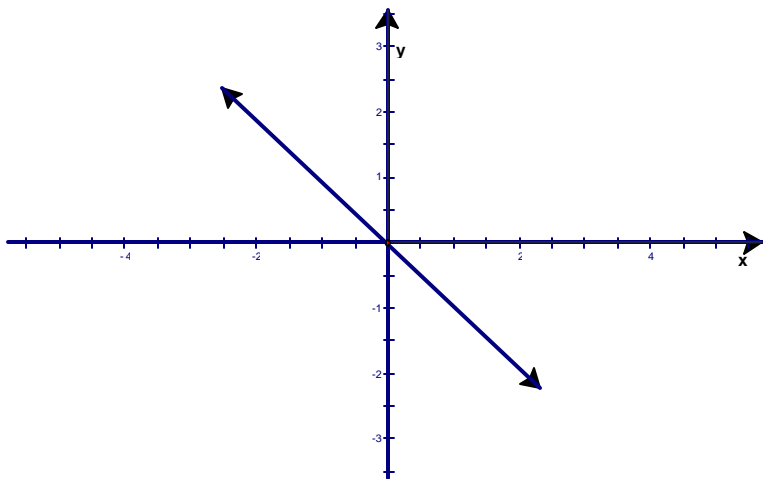(i)the slope is positive, negative, zero, or undefined

ii) the y-value of the y-intercept is positive, negative, or zero.

This is an ascending line, therefore the slope is positive.

$$m > 0$$

$$b < 0$$

This is a descending line, therefore the slope is negative.

$$m < 0$$

$$b = 0$$