

BE-1A TUESDAY 12-2-08

SOLVE:

① $2x + 6 = 5x - 9$

② $3x - 2y = 15$ for y

③ $\frac{5x}{8} = \frac{7}{2}$

④ WHAT KIND OF EQUATION IS #③?

⑤ DEFINE A RELATION

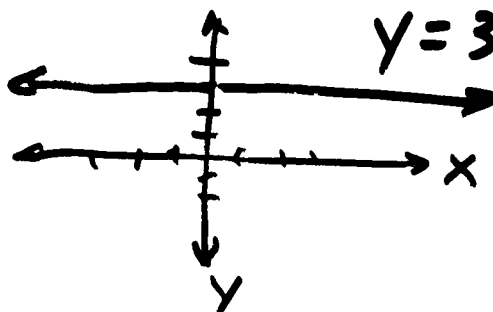
• Homework review: Pg 221 #28-31

Two special lines:

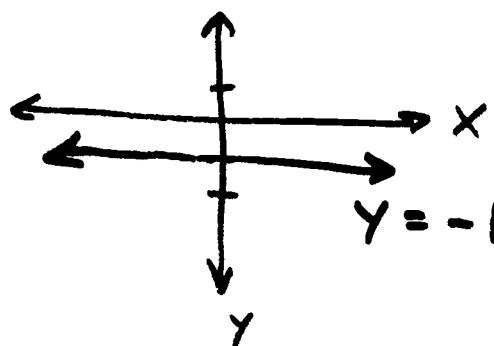
HORIZONTAL LINES

Ⓔ $y = 3$

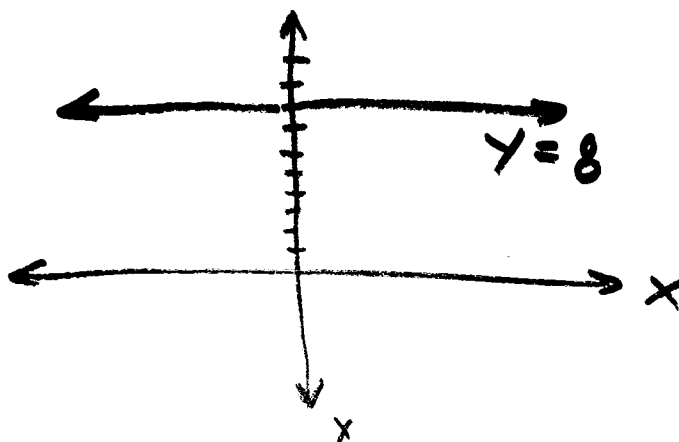
x	y=3
-2	3
-1	3
0	3
1	3
2	3
Anything	3



Ⓔ $y = -1$



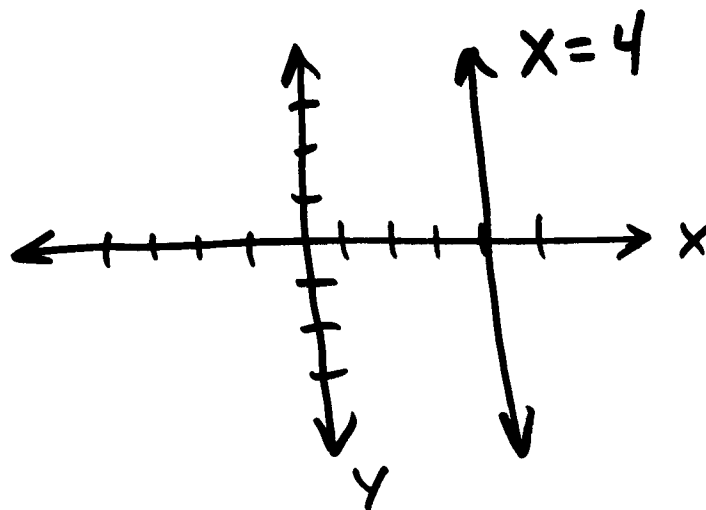
Ⓔ $y = 8$



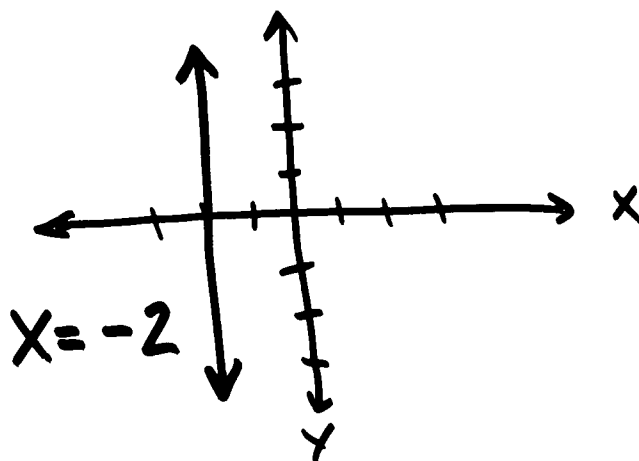
VERTICAL LINES $\updownarrow$

Ex $X = 4$

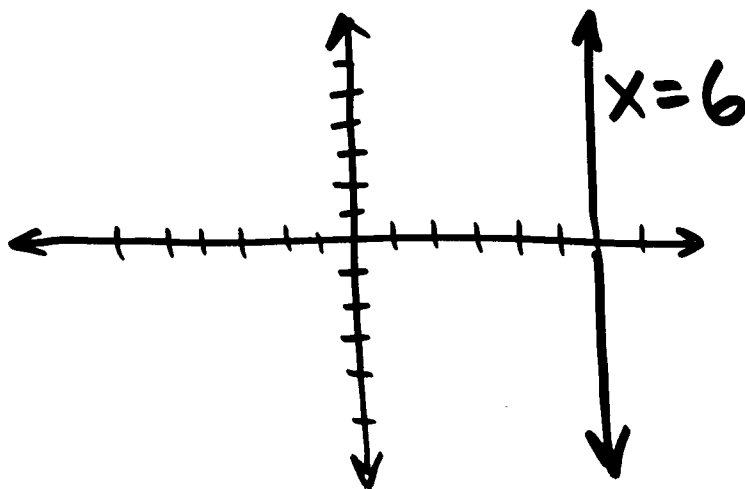
X	Y
4	ANYTHING
4	ANYTHING
4	ANYTHING



Ex $X = -2$



Ex $X = 6$



Practice: GRAPH $x + 4y = 10$

Solve for y : $x + 4\overset{\downarrow}{y} = 10$

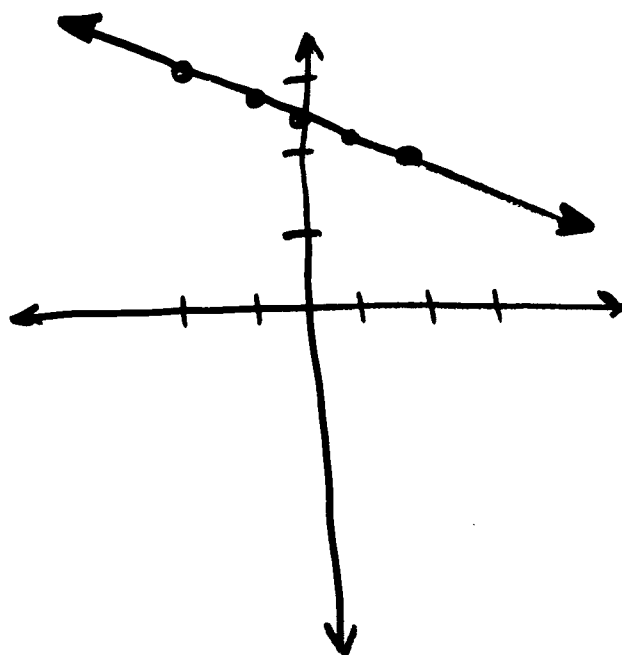
$-x$

$-x$

$$\frac{4y}{4} = \frac{-x + 10}{4}$$

$$y = -\frac{1}{4}x + \frac{5}{2}$$

x	$-\frac{1}{4}x + \frac{5}{2} = y$
-2	$-\frac{1}{4}(-2) + \frac{5}{2}$ $\frac{1}{2} + \frac{5}{2} = \frac{6}{2} = 3$
-1	$-\frac{1}{4}(-1) + \frac{5}{2}$ $\frac{1}{4} + \frac{10}{4} = \frac{11}{4} = 2\frac{3}{4}$
0	$\frac{5}{2} = 2\frac{1}{2}$
1	$-\frac{1}{4}(1) + \frac{5}{2}$ $-\frac{1}{4} + \frac{10}{4} = \frac{9}{4} = 2\frac{1}{4}$
2	$-\frac{1}{4}(2) + \frac{5}{2}$ $-\frac{1}{2} + \frac{5}{2} = \frac{4}{2} = 2$



GRAPH: $4x + 3y = 12$

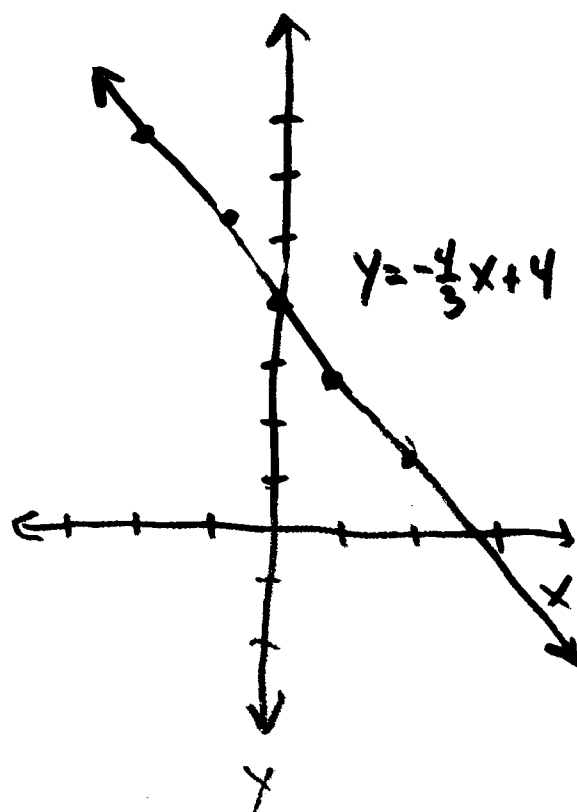
$$-4x$$

$$-4x$$

$$\frac{3y}{3} = \frac{-4x + 12}{3}$$

$$y = -\frac{4}{3}x + 4$$

X	$-\frac{4}{3}x + 4 = y$
-2	$-\frac{4}{3}(-2) + \frac{4}{1}$ $\frac{8}{3} + \frac{12}{3} = \frac{20}{3} = 6\frac{2}{3}$
-1	$-\frac{4}{3}(-1) + \frac{4}{1}$ $\frac{4}{3} + \frac{12}{3} = \frac{16}{3} = 5\frac{1}{3}$
0	4
1	$-\frac{4}{3}(1) + \frac{4}{1}$ $-\frac{4}{3} + \frac{12}{3} = \frac{8}{3} = 2\frac{2}{3}$
2	$-\frac{4}{3}(2) + \frac{4}{1}$ $-\frac{8}{3} + \frac{12}{3} = \frac{4}{3} = 1\frac{1}{3}$



Homework:

Pg. 221 #26, 27, 32, 33, 34
