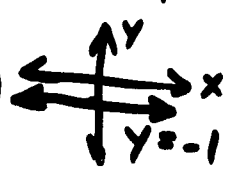
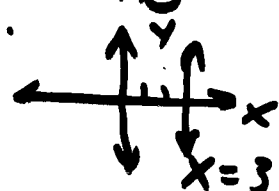


BE-Alg. 1 MONDAY 10-31-11

- ① Find 5 consecutive integers whose sum is 290.
- ② Write the EOL for the line through $(-\frac{5}{4}, 1)$, $(-\frac{1}{4}, \frac{3}{4})$
- ③ Write the EOL with an x-intercept of 6 and a y-intercept of 3
- ④ Graph $y = -1$
- ⑤ Graph $x = 3$

Answers

- ① 56, 57, 58, 59, 60 ② $y = -\frac{1}{4}x + \frac{11}{16}$
- ③ $y = -\frac{1}{2}x + 3$ ④  ⑤ 

Vocabulary... A ROSE BY ANY OTHER NAME...

LINEAR EQUATIONS THAT HAVE A
 $b = 0$ (that is, they go through the origin)

ARE SO COMMON THEY HAVE THEIR
OWN NAMES.

If $y = mx + b$ AND $b = 0$

$$y = mx$$

(d*)

This is called a Direct Variation

$y = mx$ IS OFTEN WRITTEN

(d*)

$y = kx$ k IS THE CONSTANT OF
VARIATION

k AND m ARE THE
SAME THING!

The words "y varies directly as x" means you have a direct variation which means $y = mx$

EX 4 PG 266 $\Rightarrow$ Ch. 5-2 Slope and Direct Variation

Suppose y varies directly as x and $y = 28$ when $x = 7$.

① Write the direct variation equation (linear equation)

$$y = mx$$

$$\therefore b = 0$$

$$\frac{28}{7} = \frac{m \cdot 7}{7}$$

$$\therefore m = 4$$

$$\therefore \boxed{y = 4x}$$

② Find x when $y = 52$

$$y = 4x$$

$$\frac{52}{4} = \frac{4x}{4}$$

$$\therefore \boxed{x = 13}$$

How do you graph:

Ex ②
Pg 265

$$y = 4x$$

Ex ③

$$y = -\frac{1}{3}x$$

Graphing Calculator Exercise

Pg 265

Ex 5
Pg 266

Geese, 375 miles in 7.5 hr.

① Write the D.V.

Use $d = rt$

② Graph

③ time to 3000 mi.?

Practice: Pg 267 # 2, 3, 4.

Homework: Pg 268 # 15, 18, 21, 22,
33-37.