

BE-1A MONDAY 3-5-07

① WRITE THE EOL through $(4, 6)$
AND PARALLEL TO $y = 4x - 3$

② WRITE THE EOL through $(4, 6)$
AND PERPENDICULAR TO $y = 4x - 3$

— REFER TO Ch. 5-6 for these —

③ WHAT IS b in the
line $y = 3x$? WHAT DOES
IT MEAN, THAT IS, DESCRIBE THE LINE.

①

When b , the y -intercept is zero,
the line crosses the y -axis at
the origin.

Since $b = 0$, $y = mx + b$
is simply $y = mx$

This type of line occurs so often
it has its own name.

No, not Fred... it is called a

DIRECT VARIATION

" y varies directly as x "

m is called the "constant of variation"
 m has its own name.

m is called k

(2)

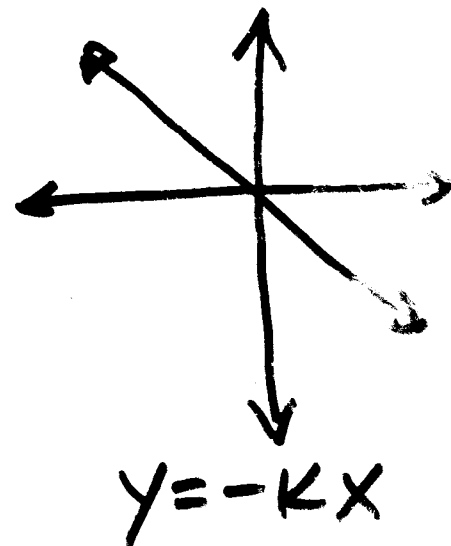
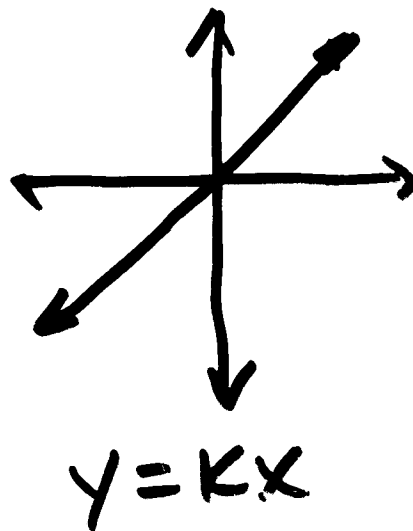
Summary:

A line through the origin ($b=0$)
is called a direct variation
(Y varies directly as X)

$$Y = mX$$

$$\text{or } Y = kX$$

↑
THE SLOPE is called the
CONSTANT OF VARIATION. It
can be $\oplus$ or $\ominus$



Pg. 264 & 265

EX 1

EX 2

EX 3

Typical Problem:

Y VARIES DIRECTLY AS X AND
 $Y = 28$, when $X = 7$.

WRITE THE D.V. EQUATION

USE THE D.V. Eg. to find
 X when $Y = 52$.

↑ EX 4 PG 266 ↑

YOUR TURN: D.V., WHEN $X = 3$, $Y = 8$ FIND EOL

FIND X WHEN $Y = 6$

FIND Y WHEN $X = \frac{1}{2}$

HW: Read Ch 5-2, Pg 267 # 1-10