

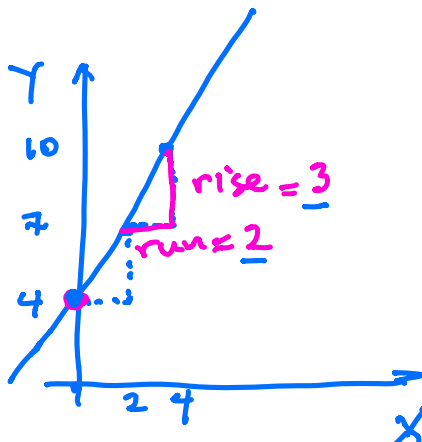
Four Forms of Linear Models

English

"the initial value of y is 4 and it increases by 3 for every increase of 2 units in x "

"the base cost is \$15 plus \$5 for every 100 MB used"

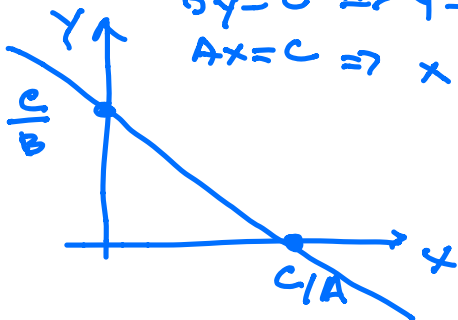
Graph



$$Ax + By = C$$

$$By = C \Rightarrow y = \frac{C}{B}$$

$$Ax = C \Rightarrow x = \frac{C}{A}$$



Numbers

x	y
0	4
2	$4+3=7$
4	10
6	13
$\vdots$	$\vdots$

Equation

rise = slope
run

$$y = mx + b$$

y -intercept

$$y = \frac{3}{2}x + 4$$

$$7 = \frac{3}{2}(2) + 4$$

$$y = mx + b$$

$$-mx + y = b$$

$$Ax + By = C$$

$$By = C - Ax$$

$$y = \frac{C}{B} - \frac{A}{B}x$$