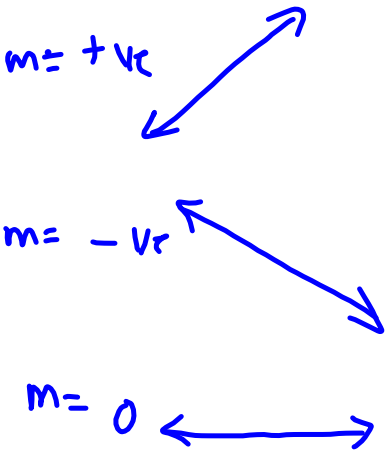
$y = mx + b$

slope - positive number means graph rises to the right

- negative number means graph rises to the left

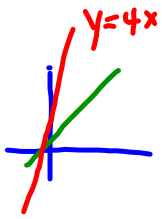
- zero



① $y = x$ $m = 1$ graph rises to the right at 45°
y-int = 0 so graph goes through (0,0)

② $y = -x$ $m = -1$ graph rises to the left at 45°
y-int = 0 so graph goes through (0,0)

③ $y = x$ Graphs rise to the right. $y = 4x$ is steeper than 45°
$y = 4x$ y-ints are both (0,0)



④ $y = x$
$y = \frac{1}{5}x$

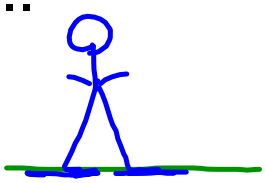
Graphs have different slopes. Both slopes are positive so graphs rise to the right. m = 1/5 so this graph is less than 45^0. Both y-intercepts are (0,0).

⑤ $y = x$ $m=1$ parallel lines. Graphs rise to the right at 45°. y-ints = $(0,0)$, $(0,2)$
$y_1 = x+2$ $(0,-5)$
$y_2 = x-5$

⑥ $y = \frac{2}{5}x$ $m=\frac{2}{5}$ parallel lines. Line rise to the right $<45°$.
$y = \frac{2}{5}x + 3$ Intercepts are $(0,0)$ and $(0,3)$.

⑦ finish to the end of 9.

Slope...



$m = 0$

$m =$ undefined