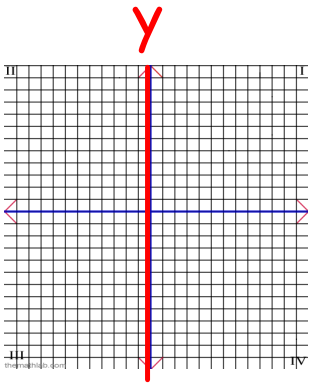
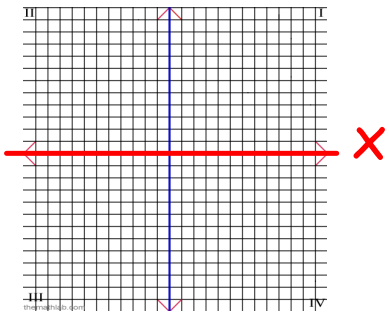
What is the slope of the y-axis?



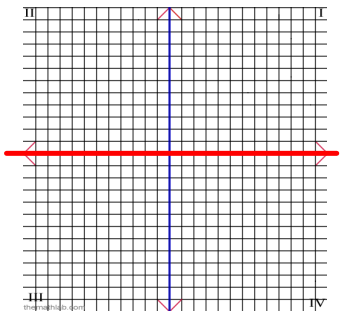

$= \frac{1}{0}$

What is the slope of the x-axis?

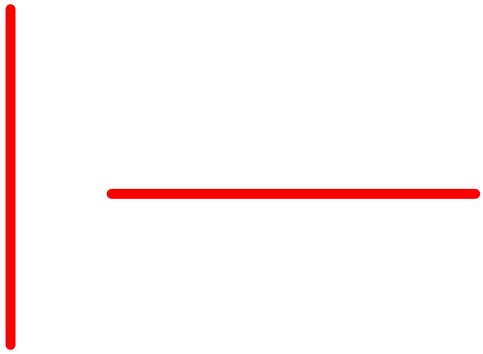



$\frac{0}{1}$

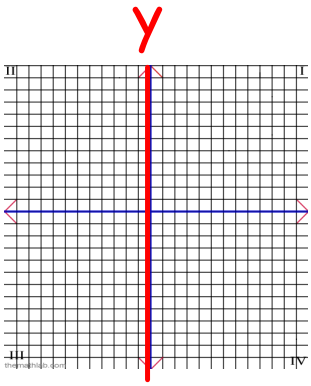
What is the slope <u>parallel</u> to the x -axis?



$x = \frac{0}{1}$

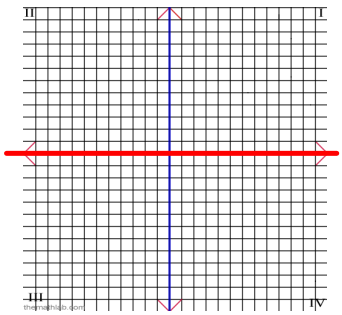


What is the slope parallel to the y-axis?



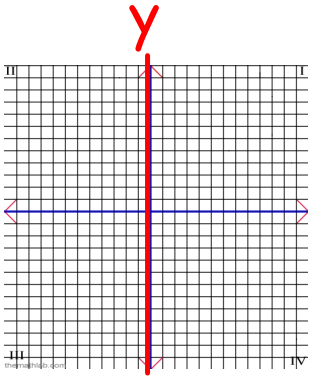

$= \frac{1}{0}$

What is the slope perpendicular to the x -axis?

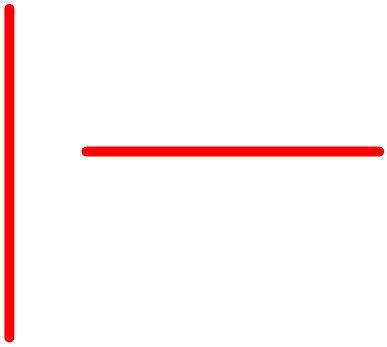


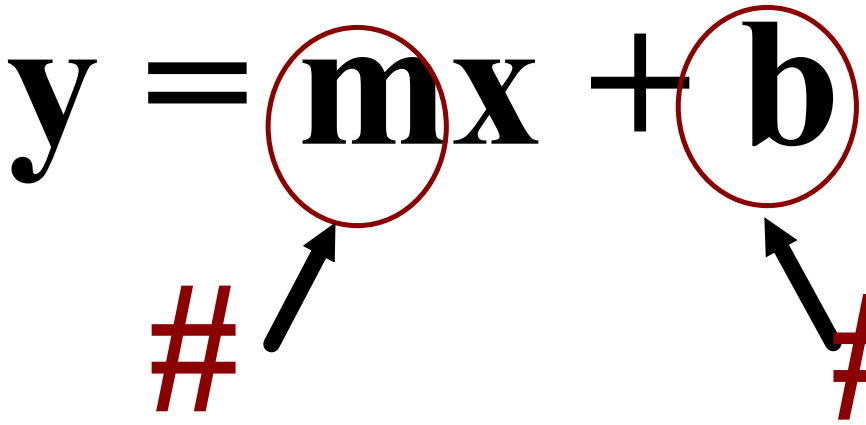
$x = \frac{1}{0}$

What is the slope <u>perpendicular</u> to the y-axis?




$= \frac{0}{1}$






m = Rate of Change ( Slope )
b = initial amount (vertical intercept or y-int.)
x = represents the x-axis
y = represents the y-axis

State the slope and the y-int (initial amount)

1. $y = 5x - 1$ $m = 5$ $b = -1$
2. $y = 3x + 5$ $m = 5$ $b = 5$
3. $y = 3/2x - 8$ $m = 3/2$ $b = -8$
4. $y = 7 + 2x$ $m = 2$ $b = 7$
5. $2x - 1 = y$ $m = 2$ $b = -1$

State the slope ~~parallel~~ same to $y = 8x - 1$.

Slope = 8

Ans = 8

State the slope ~~perpendicular~~ opp rec. to y =-2/3x -3

Slope = $-\frac{2}{3}$

Ans = $+\frac{3}{2}$

State the slope ~~parallel~~ Same slope to $y = -5x + 3$

Slope $= -5$

Ans $= -5$

State the slope ~~perpendicular~~ opp rec. to $y = -1/3x - 4$

Slope $= -\frac{1}{3}$

Ans $= +3$

State the slope ~~perpendicular~~ opp rec. to $y = 3x + 6$

Slope $= \frac{3}{1}$

Ans $= -\frac{1}{3}$

State the slope ~~perpendicular~~ app rec. to $2y - 4 = 3x + 6$

$2y - 4 = 3x + 6 + 4$

$\frac{2y}{2} = \frac{3x + 10}{2}$

$y = \frac{3}{2}x + 5$

Slope $= \frac{3}{2}$

Ans $= -\frac{2}{3}$

State the slope ~~perpendicular~~ approx. to $3(y - 1) = 3x + 6$

Slope = 1

Ans = $\frac{-1}{1}$ = -1

$3(y-1) = 3x+6$

$3y-3 = 3x+6+3$

$\frac{3y}{3} = \frac{3x}{3} + \frac{9}{3}$

$y = 1x+3$