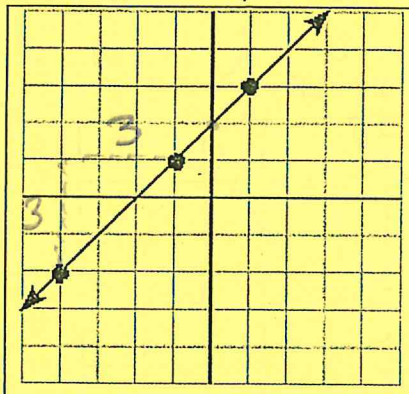
Slope of a Line
Slope #1 HW # 71

$y = mx + b$ (slope, y-int.)

Name: KEY

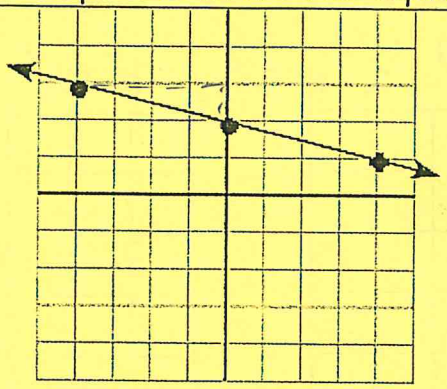
Find the slope of the following lines. First, make a slope triangle and find the ratio. Next, find the y-intercept and write the equation of each line.



Method 1: $\frac{rise}{run} = \frac{3}{3} =$ **1**

y-int: (0, 2)

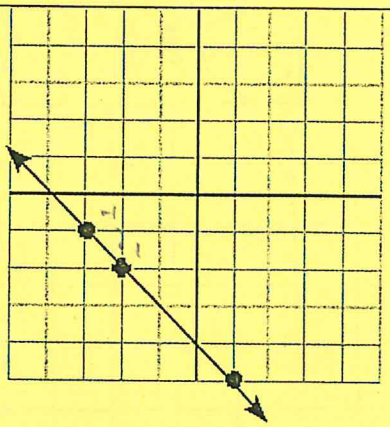
Equation: $y = 1x + 2$ → $y = x + 2$



Method 1: $\frac{rise}{run} = \frac{-1}{4}$ **$\frac{-1}{4}$**

y-int: (0, 2)

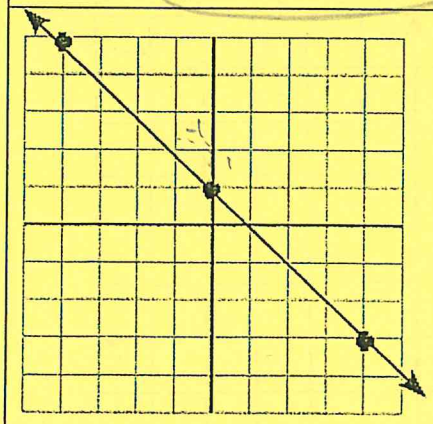
Equation: $y = -\frac{1}{4}x + 2$



Method 1: $\frac{rise}{run} = \frac{1}{-1}$ **-1**

y-int: (0, -4)

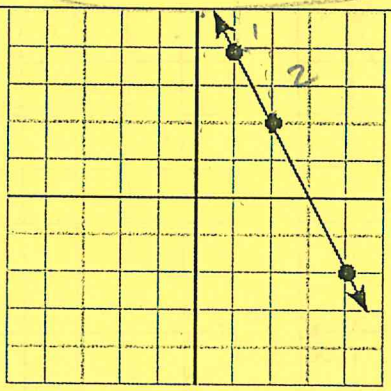
Equation: $y = -x - 4$



Method 1: $\frac{rise}{run} = \frac{1}{-1}$ **-1**

y-int: (0, 1)

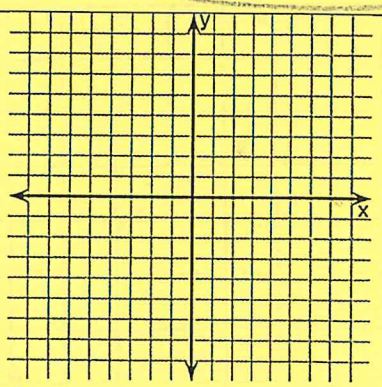
Equation: $y = -x + 1$



Method 1: $\frac{rise}{run} = \frac{2}{-1}$ **-2**

y-int: (0, 6)

Equation: $y = -2x + 6$



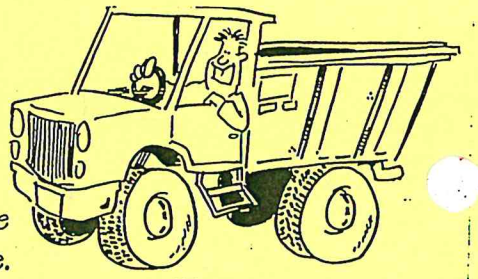
Create your own!

Method 1: $\frac{rise}{run} =$ **□**

y-int: _____

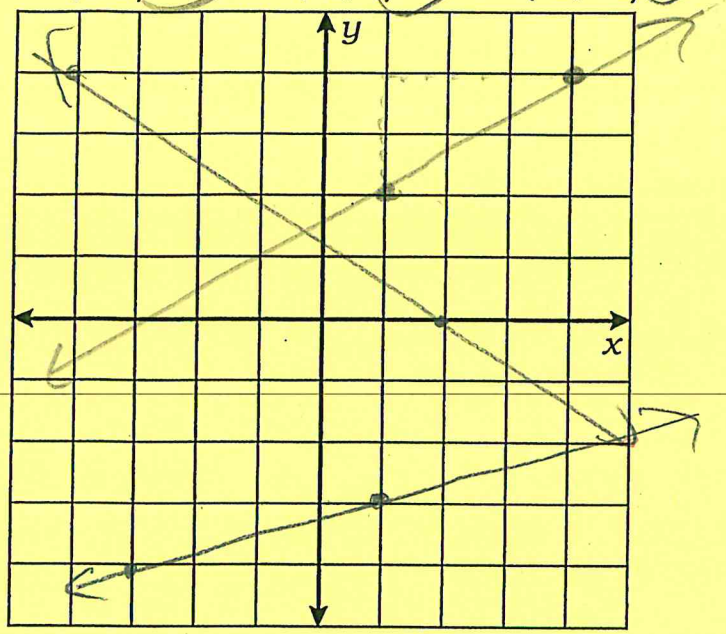
Equation: _____

What Did the Inventor of the 10-Ton Truck So Often Say?

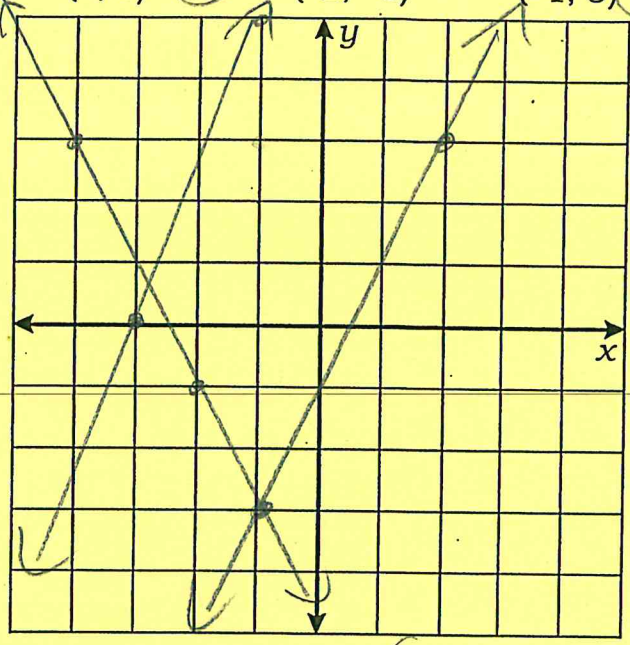


For each exercise, draw a line through the two given points. Find the slope of this line. Write the letter of the exercise in the box containing the slope.

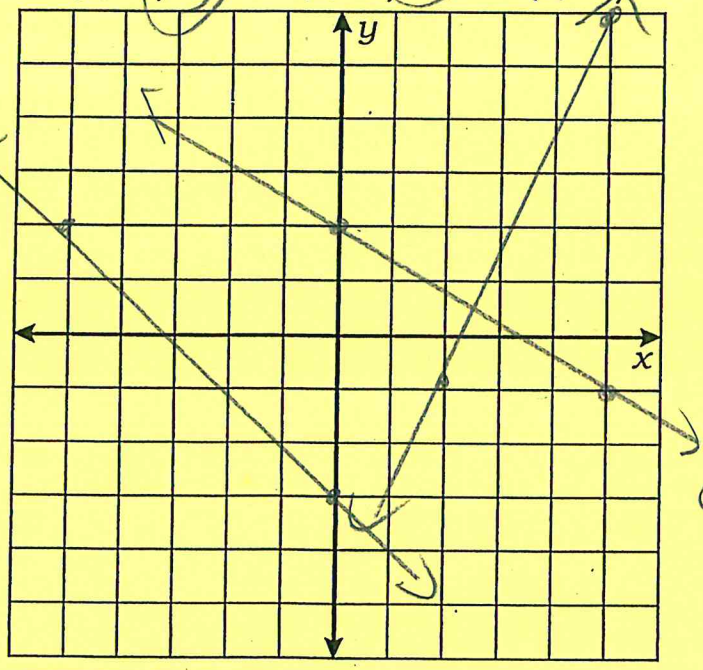
B (4, 4) (1, 2) $\frac{2}{3}$ **E** (2, 0) (−4, 4) $-\frac{2}{3}$ **O** (1, −3) (−3, −4) $\frac{1}{4}$



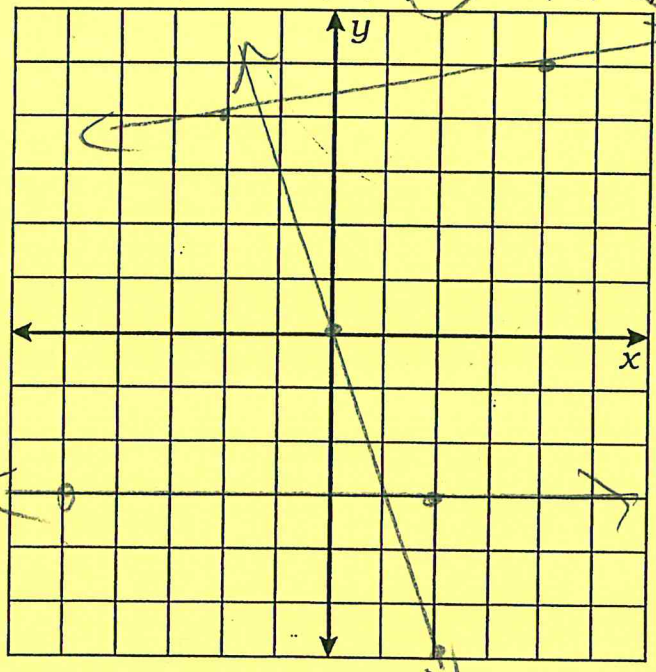
I (−1, −3) (2, 3) 2 **E** (−4, 3) (−2, −1) −2 **O** (−3, 0) (−1, 5) $\frac{5}{2}$



E (0, 2) (5, −1) $-\frac{3}{5}$ **D** (5, 6) (2, −1) $\frac{7}{3}$ **L** (−5, 2) (0, −3)



D (0, 0) (2, −6) −3 **G** (4, 5) (−2, 4) $\frac{1}{6}$ **S** (2, −3) (−5, −3) 0



$\frac{1}{3}$	-3 D	2 I	$-\frac{2}{3}$ E	0 S	-2 E	-1 L	$-\frac{7}{2}$	$\frac{2}{3}$ B	$-\frac{3}{5}$ E	$-\frac{1}{5}$	$\frac{1}{6}$ G	$\frac{5}{2}$ O	$\frac{1}{4}$ O	$\frac{7}{3}$ D	3