

**Graphing from Equation  $y = mx + b$  (without using t.o.v.)**

To graph a linear equation in the form  $y = mx + b$  directly from the equation:

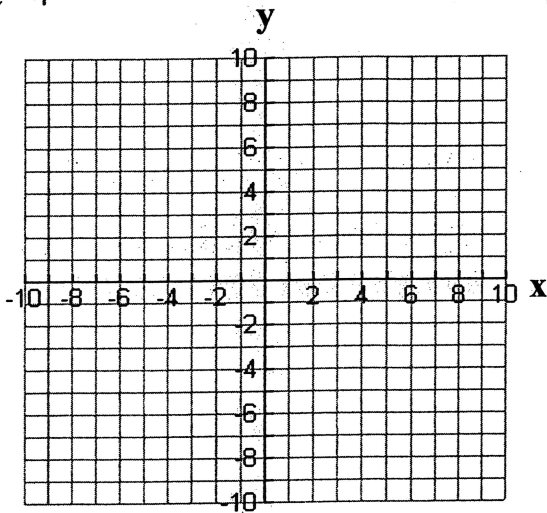
1. Determine the slope ( $m$ ) and y-int ( $b$ ) from the equation
2. Express the slope as a fraction (and associate any negatives with the top); the top is the rise and the bottom is the run.
3. Put the y-int on the graph.
4. Use the slope to get a second and third point.
5. Extend a line through the three points and label the line.

**Graph each linear equation without using a table of values.**

a)  $y = 2x - 4$

$m =$

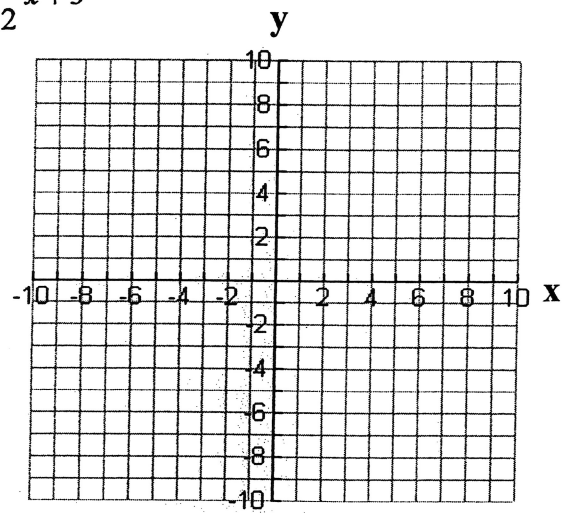
$b =$



b)  $y = -\frac{1}{2}x + 3$

$m =$

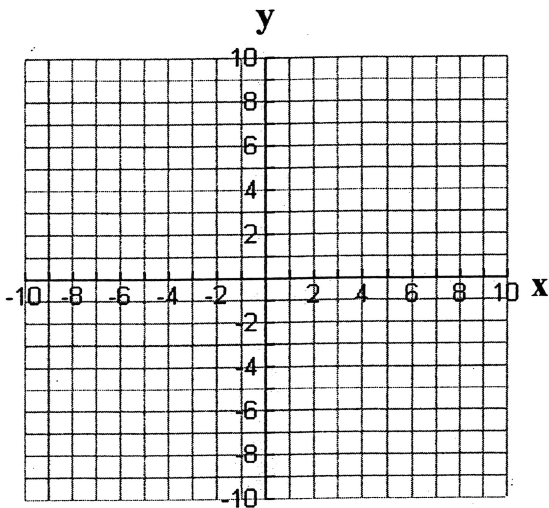
$b =$



c)  $y = 2x$

$m =$

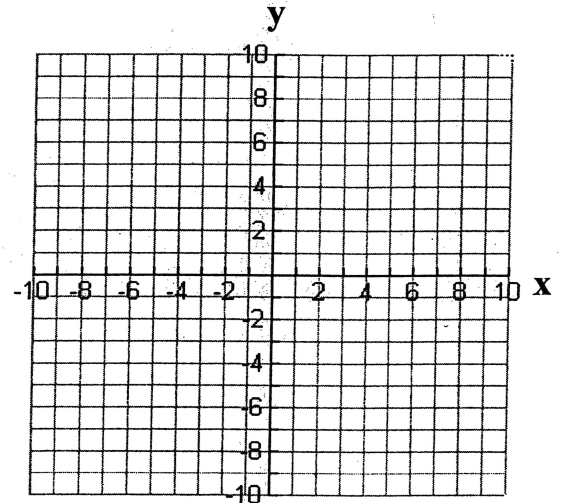
$b =$



d)  $y = -2$

$m =$

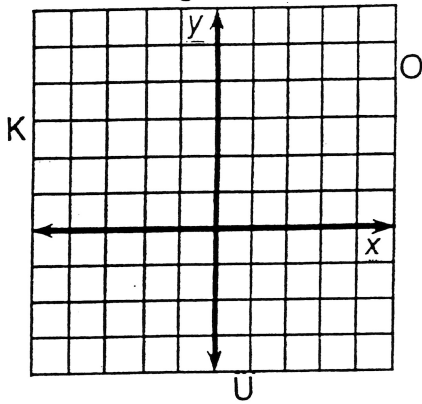
$b =$



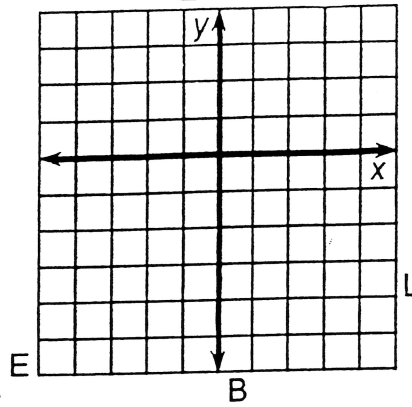
# Whom Should You See at the Bank If You Need To Borrow Money?

Use the slope and  $y$ -intercept to graph each equation below. The graph, if extended, will cross a letter. Print this letter in each box that contains the number of that exercise.

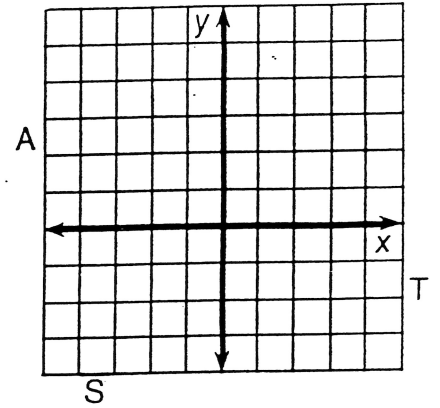
①  $y = \frac{2}{3}x + 1$



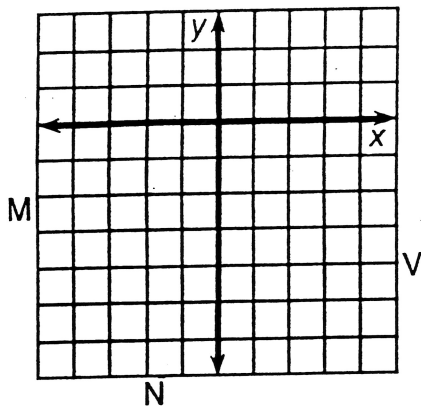
②  $y = \frac{1}{2}x - 3$



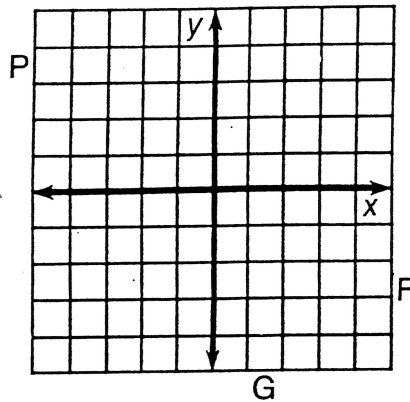
③  $y = -\frac{3}{4}x + 2$



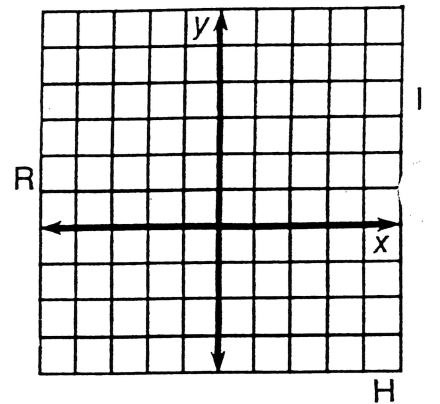
④  $y = 2x - 4$



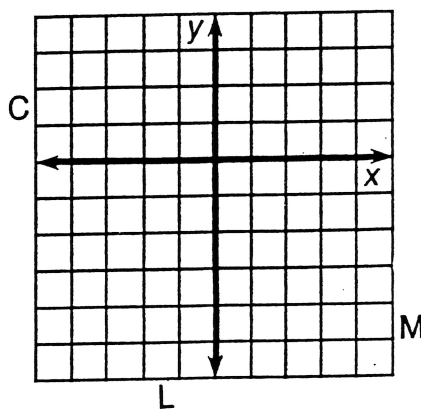
⑤  $y = -3x - 1$



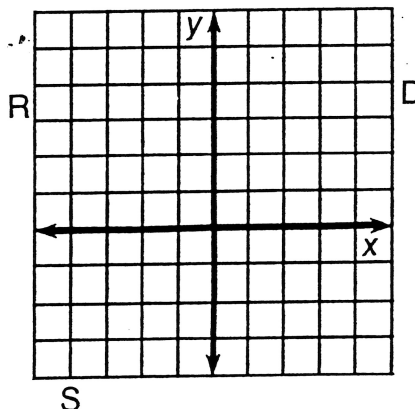
⑥  $y = -\frac{3}{2}x + 3$



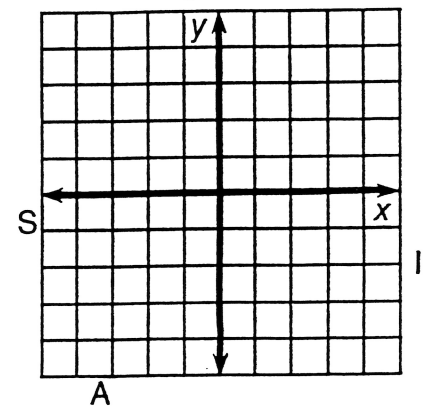
⑦  $y = 4x - 2$



⑧  $y = -\frac{1}{4}x + 2$



⑨  $y = \frac{5}{3}x$



3	6	2	7	1	9	4	9	8	8	9	4	5	2	8
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