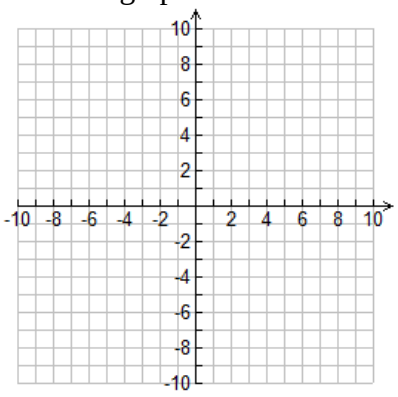
Review: Equations of Linear Relations

1. A line has a slope of $-\frac{1}{3}$ and a y-intercept of -2.

(a) Sketch a graph of the line.



(b) Write the equation of the line in slope-y-intercept form.

(c) Now write the equation in standard form.

2. Given the following equations of linear relations, state the slope and y-intercept.

(a) $y = x - 6$

$m =$ _____

$b =$ _____

(b) $y = -x + 10$

$m =$ _____

$b =$ _____

(c) $x = -7$

$m =$ _____

$b =$ _____

(d) $y = -7$

$m =$ _____

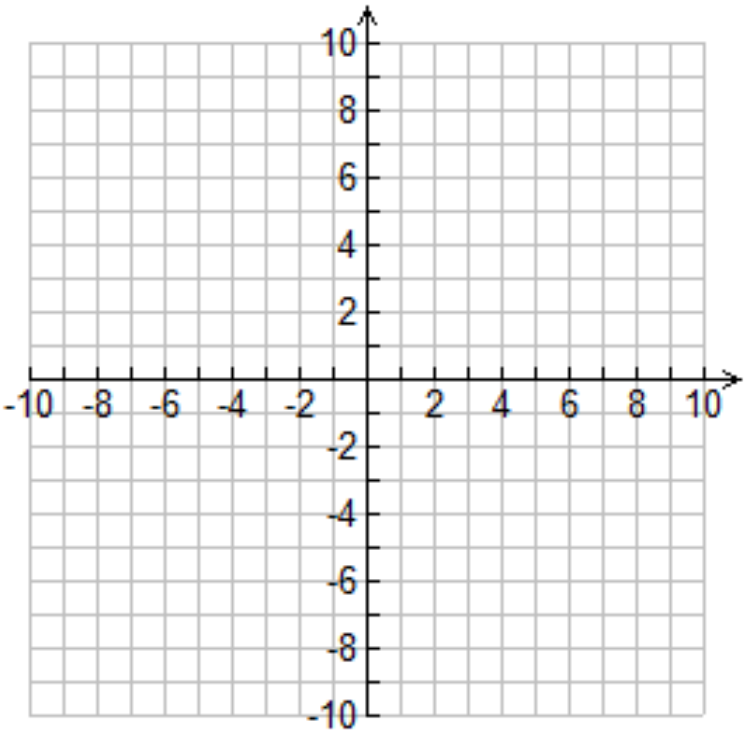
$b =$ _____

(e) $5x - 2y - 10 = 0$

$m =$ _____

$b =$ _____

3. Using the grid provided below, graph each of the relations in question 2. (Graph 2(e) using the intercepts method.)



4. Hannah's total pay includes a base salary and a percent of her sales.

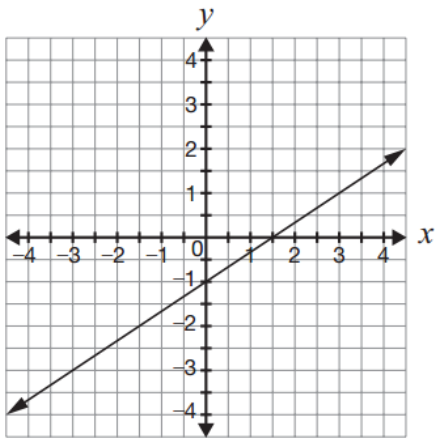
The following table shows her total pay for three different sales levels.

Sales ($)	Total pay ($)
15 000	1700
17 500	1825
28 000	2350

Determine Hannah's total pay when her sales are $47 000.

Show your work.

5. Consider the two relations represented below.

Relation 1	Relation 2
$5x-2y=4$	

Determine the slope of the line representing each relation.

Show your work.