

Name _____

Date _____

Equation of a line

- A number that describes the steepness of a line is called the _____ of the line.
- The _____ is the y-coordinate of the point where a line crosses the y-axis. For example, when a line crosses the y-axis at (0,3), the y-intercept is _____.

Slope-Intercept Form

An equation written in the form _____ is in slope-intercept form.

The graph is a line with slope _____ and y-intercept _____.

Example: In the equation $y = \frac{2}{3}x - 1$, the value _____ is the slope of the line.

The value _____ is the y-intercept of the line.

1) Identify the slope and y-intercept of each equation.

(a) $y = -\frac{3}{4}x + 2$

slope = _____

y-intercept = _____

(b) $y = 2x - 3$

slope = _____

y-intercept = _____

(c) $y = x - 4$

slope = _____

y-intercept = _____

(d) $y = \frac{1}{2}x$

slope = _____

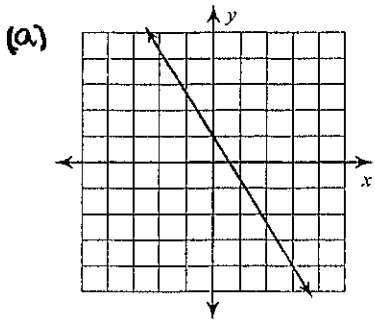
y-intercept = _____

(e) $y = -x$

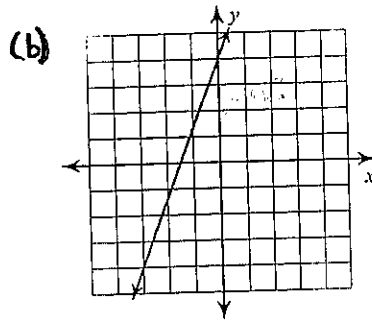
slope = _____

y-intercept = _____

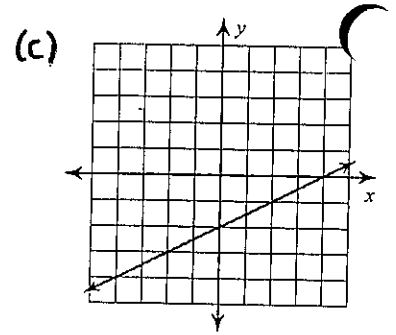
3) Find the y-intercept for each line.



b =

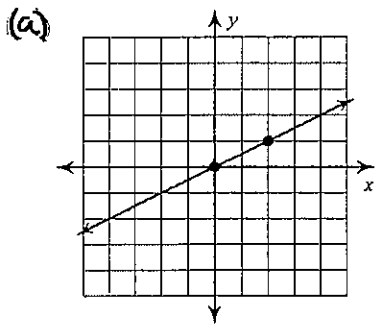


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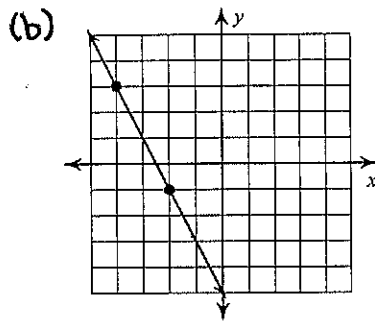


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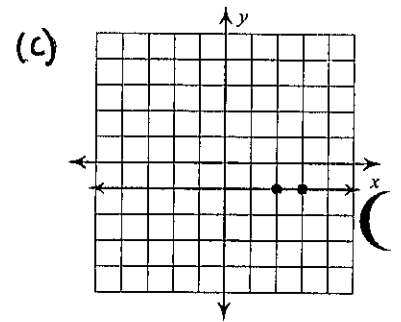
4) Find the slope of each line.



m =

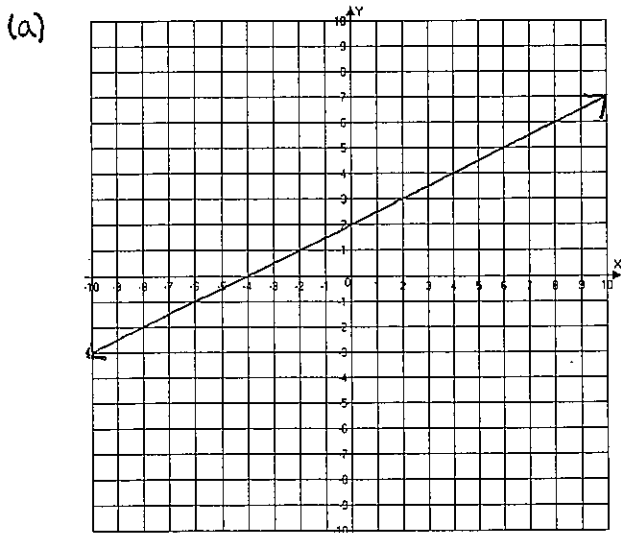


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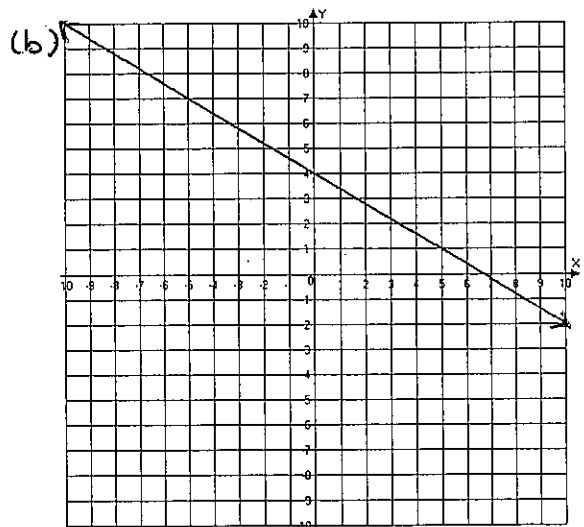


m =

5) Write the equation of each line.



Answer: _____



Answer: _____