

Date: _____

5.1B Slope-Intercept Form**y-intercept:**

- The y coordinate of the point where a graph crosses the y -axis
- The value of y when $x = 0$

slope-intercept form:

- The equation of a line in the form $y = mx + b$

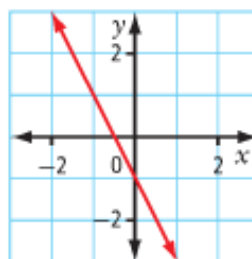
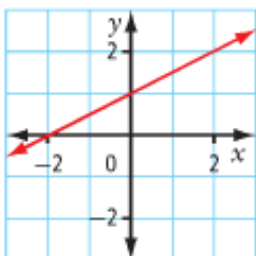
where m (the coefficient of x) is the slope and b (the constant term) is the y -intercept

Ex. State the equation of each line with the information given:

a) Slope $\frac{2}{3}$ and y -intercept -3

b) Slope -4 and y -intercept 0

Ex. State the equation of each line shown in slope-intercept form:



Ex. The line $y = \frac{1}{3}x + b$ passes through the point $(6, -1)$. Determine the value of b .

Ex. The line $y = mx + 5$ passes through the point $(-2, 1)$. Determine the value of m .

Ex . Graph each line on the grid provided:

a) $x - 3y = 6$

b) $-4x - y - 6 = 0$

