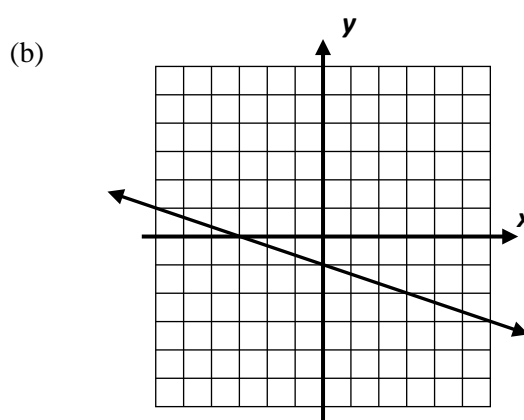
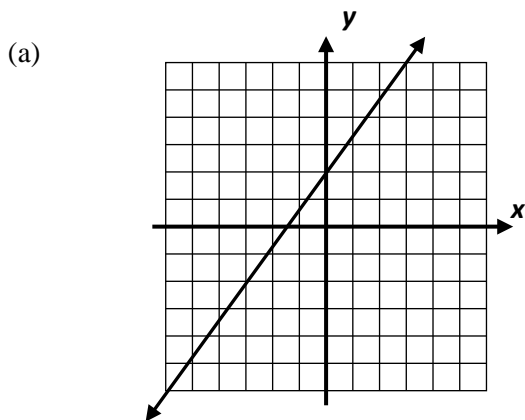
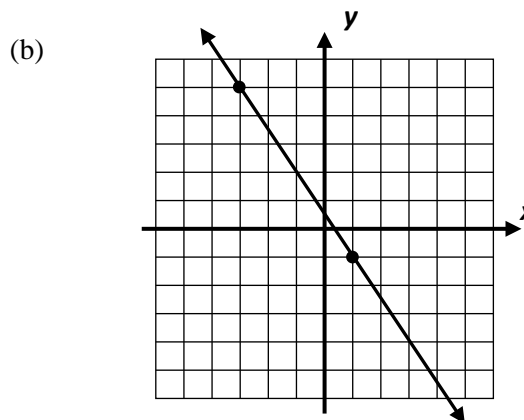
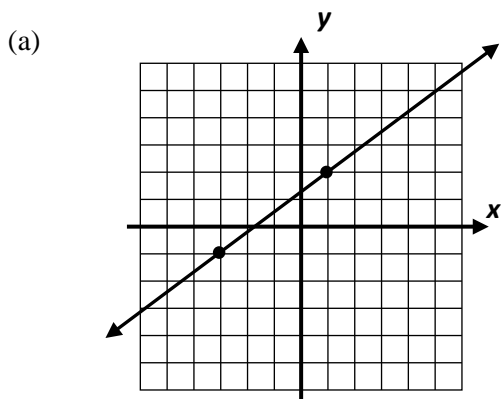


Writing Equations of Lines in Slope-Intercept Form

1. Each of the following lines has a slope and y-intercept that can be determined by examining the graph. For each, state the slope, the y-intercept, and then write the equation in $y = mx + b$ form (slope-intercept form).



2. Each of the following lines has a slope that can be determined by examining the graph. Use another point on the line to solve for the exact y-intercept. Then, state the equation of the line.



3. Find the equation of the line that passes through each of the following pairs of points in $y = mx + b$ form.

- (a) $(1, 7)$ and $(4, 22)$ (b) $(4, 6)$ and $(10, 0)$ (c) $(0, -10)$ and $(16, 2)$

R1. Solve for x , in terms of a , m and t : $ax - mt = a$

R2. For what value of x is it true that $x^3 < x < \frac{1}{x} < x^2$? (1) -2 (2) -1 (3) $-\frac{1}{2}$ (4) $\frac{1}{2}$

R3. Solve for a : $\frac{2}{3}(9a - 4) = a + 3\left(a + \frac{2}{3}\right)$

R4. Solve for x and show the solution on a number line: $-3x + 1 \leq 13$

R5. Simplify: $(4x^3 + 4x^2 - 2x - 1) - (3x^3 - x^2 + 6x + 4)$

1. (a)

$$m = \frac{4}{3}$$

$$b = 2$$

$$y = \frac{4}{3}x + 2$$

(b)

$$m = -\frac{1}{3}$$

$$b = -1$$

$$y = -\frac{1}{3}x - 1$$

2. (a) $y = \frac{3}{4}x + 1\frac{1}{4}$

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

3. (a) $y = 5x + 2$

(b) $y = -x + 10$

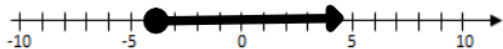
(c) $y = \frac{3}{4}x - 10$

R1. $x = \frac{a + mt}{a}$ or $x = 1 + \frac{mt}{a}$

R2. (1)

R3. $a = \frac{7}{3}$

R4. $x \geq -4$



R5. $x^3 + 5x^2 - 8x - 5$