

Section 1: Graphing from Slope-Intercept Form

Name: KEY

Graph each equation. Draw 2 graphs on each coordinate plane.

1a) $y = 5x - 8$

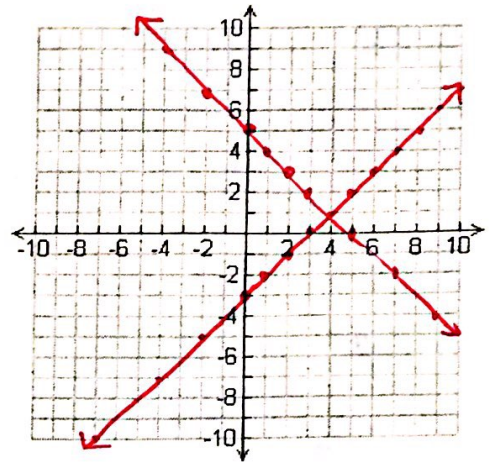
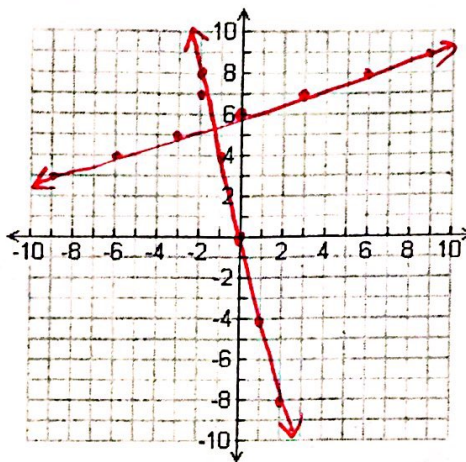
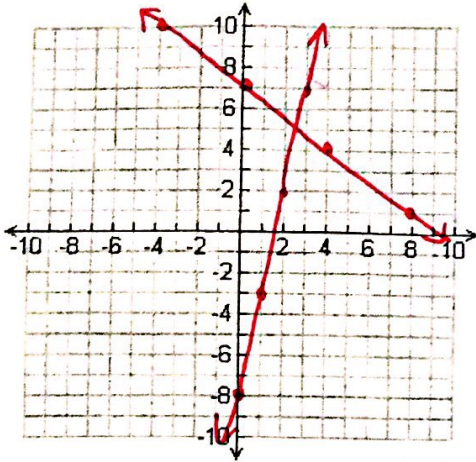
2a) $y = \frac{1}{3}x + 6$

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

1b) $y = -\frac{3}{4}x + 7$

2b) $y = -4x + 0$

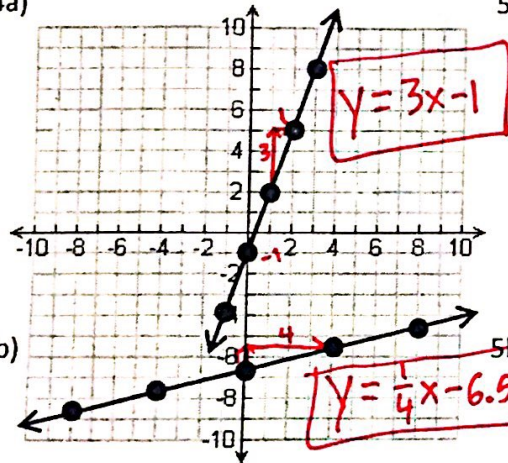
3b) $y = -\frac{1}{2}x + 5$



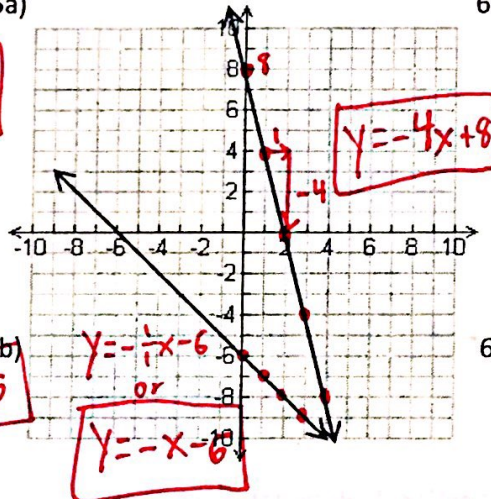
Section 2: Writing Equations in Slope-Intercept Form

Write an equation in the form $y = mx + b$.

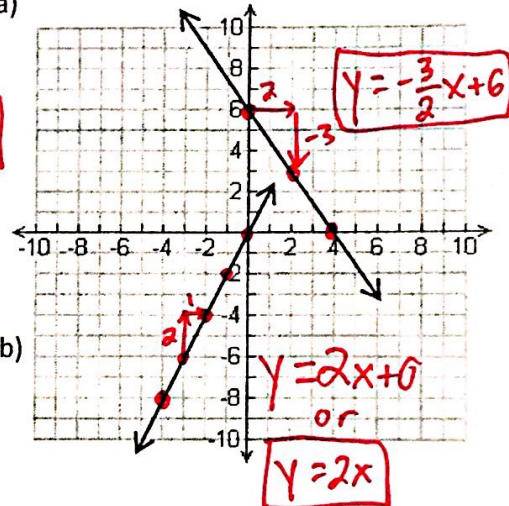
4a)



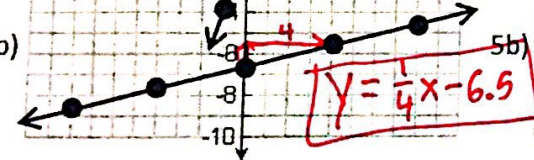
5a)



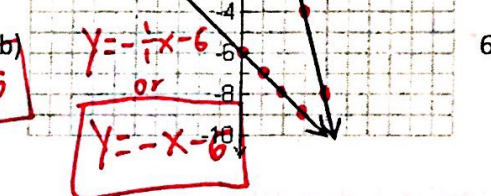
6a)



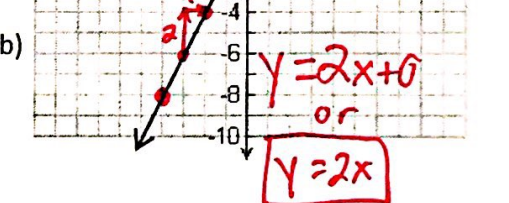
4b)



5b)



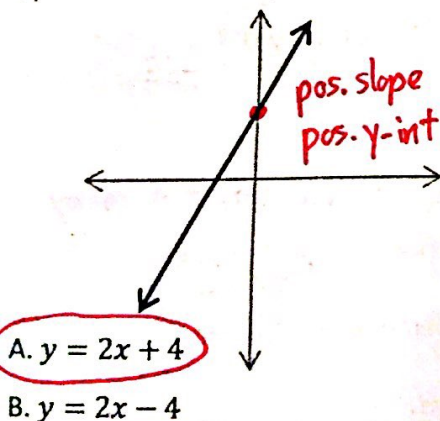
6b)



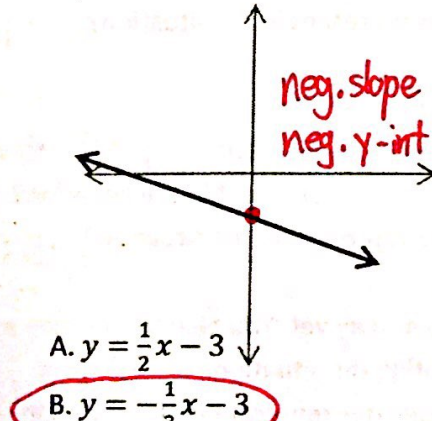
Section 3: Slope-Intercept Form without Exact Graphs

For 5-7, choose the equation that could represent the graph.

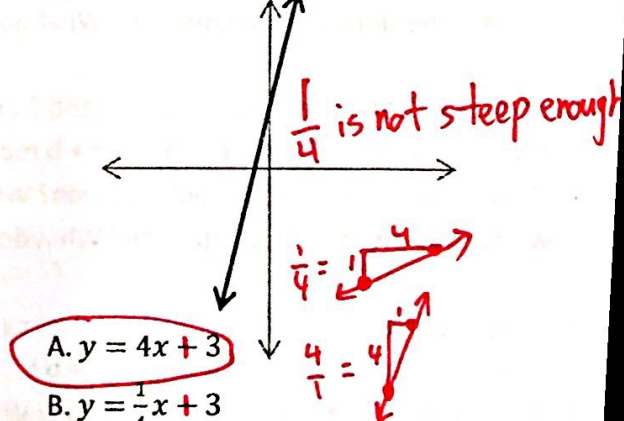
5)



6)

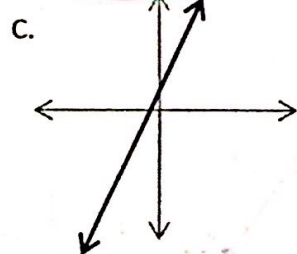
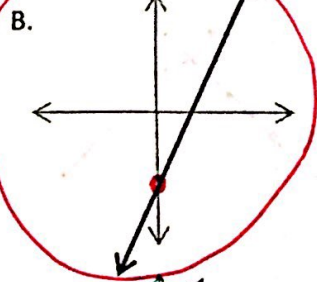
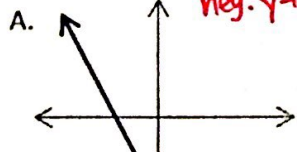


7)

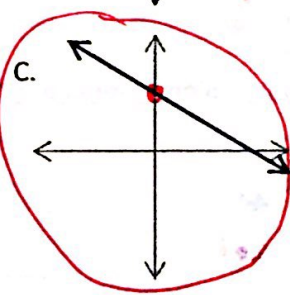
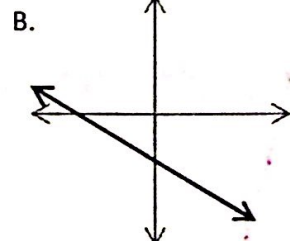
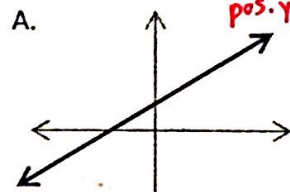


For 8-10, choose the graph that could represent the equation.

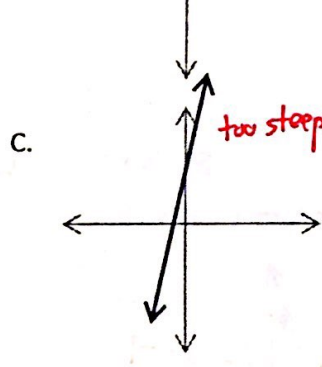
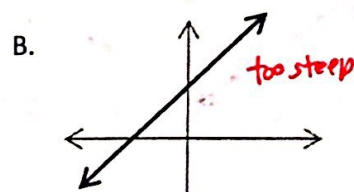
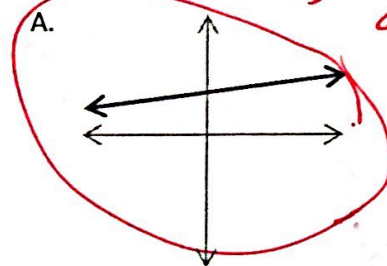
8) $y = 3x - 5$ *pos. slope
neg. y-int*



9) $y = -\frac{2}{3}x + 3$ *neg. slope
pos. y-int*

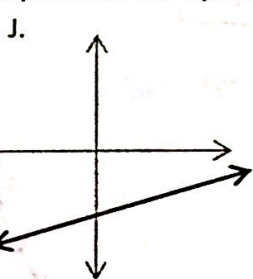


10) $y = \frac{1}{5}x + 4$

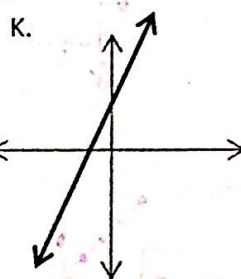


For 11-14, match the graphs with the equations.

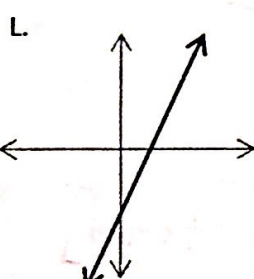
K 11) $y = 3x + 6$



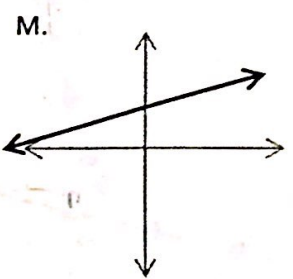
M 12) $y = \frac{1}{3}x + 6$



L 13) $y = 3x - 6$



J 14) $y = \frac{1}{3}x - 6$



Section 4: Slope-Intercept Story Problems

15) A tree was 3 feet tall when it was planted. It grew 1.5 feet per year.

a. Write an equation in the form $y = mx + b$ representing the situation. $y = 1.5x + 3$

b. What is the y-intercept of your equation? What does this represent in the situation? 3; starting height

c. What is the slope of your equation? What does this represent in the situation? 1.5; feet grown per year

16) You have \$80 in your wallet. You spend \$5 every minute.

a. Write an equation in the form $y = mx + b$ representing the situation. $y = 80 - 5x$

b. What is the y-intercept of your equation? What does this represent in the situation? 80; original amount of money

c. What is the slope of your equation? What does this represent in the situation? -5; spent \$5 per minute

17) You set up a lemonade stand. You have made no money yet. You plan to sell cups of lemonade for \$0.50 each.

a. Write an equation in the form $y = mx + b$ representing the situation. $y = 0.50x$

b. What is the y-intercept of your equation? What does this represent in the situation? 0; starting amount of money

c. What is the slope of your equation? What does this represent in the situation? 0.50; money made per cup