

Find the equation that passes through the points.

1) (-1,-5) (0,5) slope = \_\_\_\_\_

2) (-5,-3) (5,-1) slope = \_\_\_\_\_

3) (5,-3) (-3,-2) slope = \_\_\_\_\_

4) (5,-5) (1,5) slope = \_\_\_\_\_

5) (5,3) (2,4) slope = \_\_\_\_\_

6) (-5,-1) (5,-5) slope = \_\_\_\_\_

Find the x and y intercept for the following equations and then graph the equation.

1.  $5x + 2y = 10$

2.  $2x + 8y = 24$

3.  $4x + 3y = 24$

4.  $9x + 3y = 18$

1. Compare the two functions and determine which has the greater rate of change

Function 1:  $y = 2x + 4$

Function 2:

x	-1	0	2
y	-6	-3	3

2. Compare the two linear functions below and determine which has a negative rate of change

**Function 1: Sam starts with \$20 on a gift card for the bookstore. He spends \$3.50 per week to buy a magazine. Let y be the amount remaining as a function of the number of weeks x.**

x	0	1	2	3
y	20.00	16.5	13.00	9.5

**Function 2:** The school bookstore rents graphing calculators for \$5 per month. It also collects a non-refundable fee of \$10.00 for the school year. Write the rule for the total cost ( $c$ ) of renting a calculator as a function of the number of months

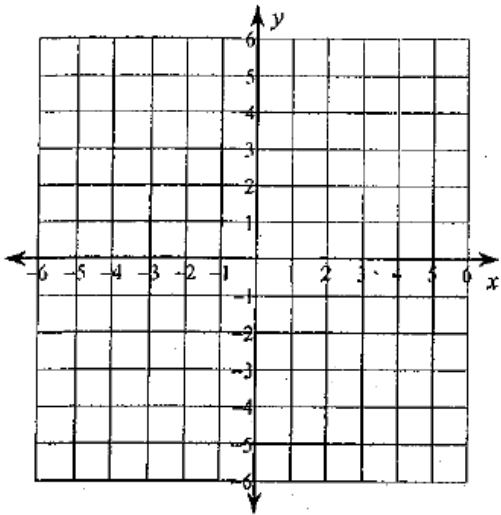
3. Which function has a greater rate of change

a.  $5x + 2y = 10$

b.  $2x + 8y = 24$

**Sketch the graph of each line.**

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



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

