#### 1.1 Review of Lines

### Objectives:

- I can define and find slope
- I can write the equation of a line
- I can can graph and write a piecewise function

Name Definition/Property

Slope

Lines that never intersect in the same plane

Perpendicular Lines

Find the slope of the following

(4, -3) and (2, 5)

Х	-8	-4	0	4
f(x)	13	10	7	4

Given the table find the slope

x	f(x)		
-1	14/3		
1	-4/3		
2	-13/3		

Name **Definition/Property** 

Vertical Line

y=k

Slope intercept form

 $y=m(x-x_1)+y_1$ 

Write the equation of the line given f(2)=3 and m = -3/2

Write the equation of the line given f(-2)=-1 and f(3)=4

General Form

# Find the slope and x-intercept given 8x+5y=20

# State the parallel and perpendicular slope of the following

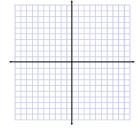
m = 3/4

Find an equation for the line through f(-1)=2 and

- a) // to y=3(x+5)-7
- b) \_\_ to y=3(x+5)-7

### Graph the following piecewise function

$$f(x) = \begin{cases} x+3, & x < 0 \\ x^2, & 0 \le x < 2 \\ 4x, & x \ge 2 \end{cases}$$



State the domain and range

### Graph the following piecewise function

$$f(x) = \begin{cases} 4 - x^2, & x < 1 \\ \frac{3}{2}x + \frac{3}{2}, & 1 \le x \le 3 \\ x + 3, & x > 3 \end{cases}$$

State the domain and range

## Write a piecewise function for the following graph

