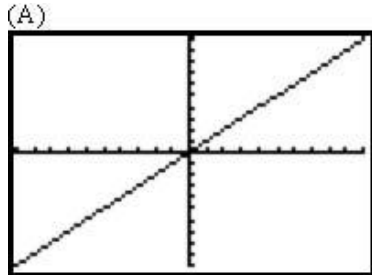


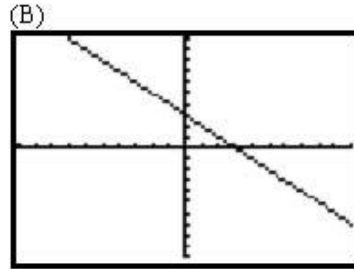
Name: KEY

Slope Homework

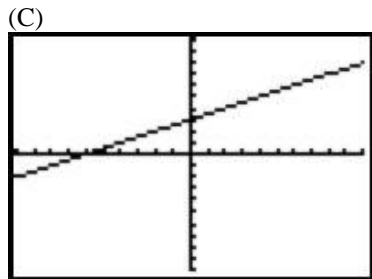
1. Find the slope of the lines graphed below. Assume the x- and y-axes count by 1's.



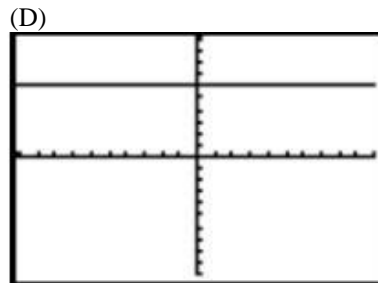
$$M=(\Delta y/\Delta x)=(1/1)=1$$



$$M=(\Delta y/\Delta x)=(-1/1)=-1$$



$$M=(\Delta y/\Delta x)=(1/2)$$



$$M=(\Delta y/\Delta x)=(0/1)=0$$

2. Find the slope given the rise and run.

(A) Rise: -6
Run: 3
Slope: $M=(\Delta y/\Delta x)=(-6/3)=-2$

(B) Rise: 3
Run: 10
Slope: $M=(\Delta y/\Delta x)=(3/10)$

(C) Rise: -9
Run: -5
Slope: $M=(\Delta y/\Delta x)=(-9/-5)=(9/5)$

(D) Rise: -1
Run: 7
Slope: $M=(\Delta y/\Delta x)=(-1/7)$

3. Find the slope given the two points.

(A) (23, 1) & (2, 6)
 $M= (y_2-y_1)/(x_2-x_1)=(6-1)/(2-23)=5/-21$

(B) (2, 7) & (0,0)
 $M= (y_2-y_1)/(x_2-x_1)=(7-0)/(2-0)=7/2$

(C) (8,10) & (8,7)
 $M= (y_2-y_1)/(x_2-x_1)=(10-7)/(8-8)=3/0$
(undefined- vertical line)

(D) (10,4) & (7,4)
 $M= (y_2-y_1)/(x_2-x_1)=(4-4)/(10-7)=0/3=0$
(horizontal line)

4. Find the parallel and perpendicular slopes based on the given information.

(A) Rise: 4

Run: 8

Parallel slope:

$$M = (\Delta y / \Delta x) = 4/8 = \mathbf{1/2}$$

Perpendicular slope: **-2**

(B) (-3,2) & (2,3)

Parallel slope:

$$M = (\Delta y / \Delta x) = (3-2)/(2+3) = \mathbf{1/5}$$

Perpendicular slope: **-5**