Due 10/15

Day 3 – Slopes

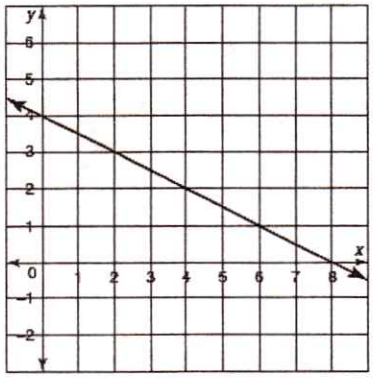
Practice Assignment

Name: _____

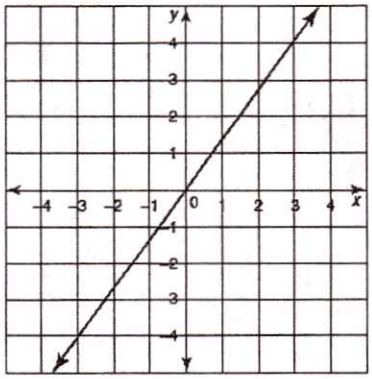
Date: _____ **Block:** _____

1. Calculate the slope and y-intercept from each graph.

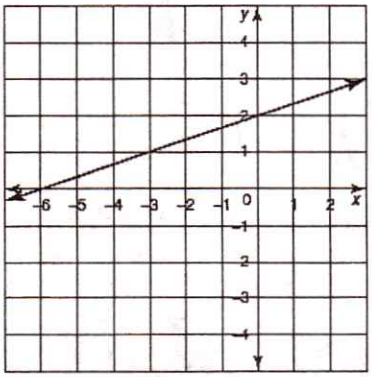
A. Slope = _____ Y-int = _____



B. Slope = _____ Y-int = _____



C. Slope = _____ Y-int = _____



2. Calculate the slope/rate of change from the table. Then calculate a "unit" rate of change and interpret its meaning.

A.

Number of Touchdowns	Total Points Scored
2	12
3	18
4	24
5	30

B.

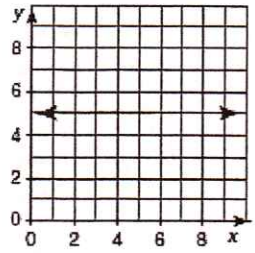
Number of Lawns	Total Earned (in Dollars)
3	25.50
5	42.50
7	59.50
9	76.50

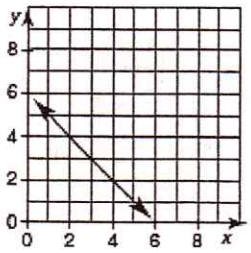
3. Calculate the slope from a set a points.

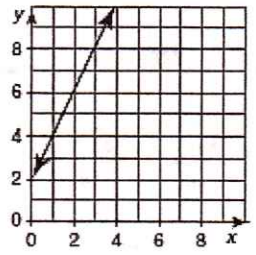
a. (-1, -24) & (2, 48)

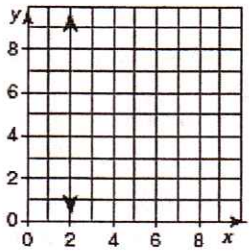
b. (4, -20) & (-10, 50)

4. Determine if the slopes are positive, negative, undefined, or zero.

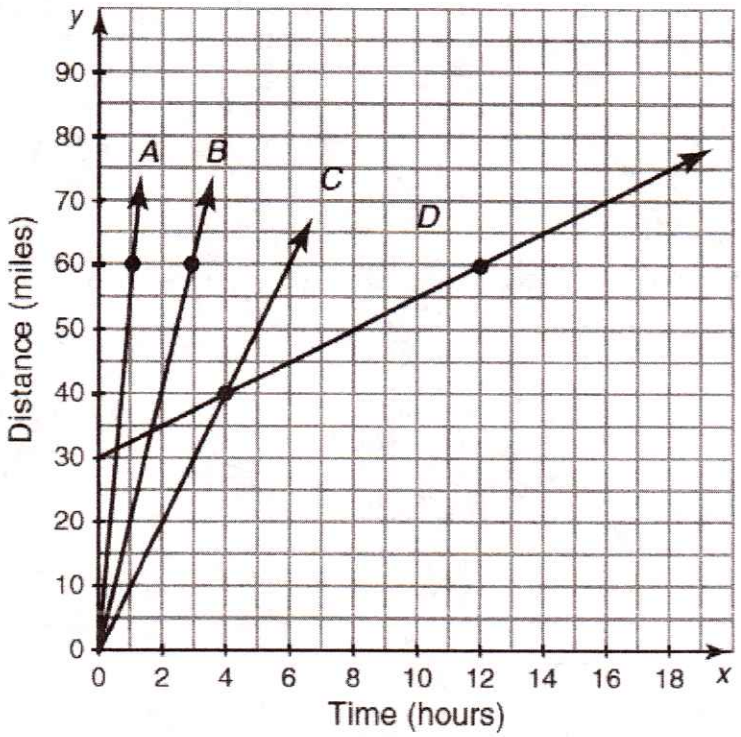








5. The graph shown represents the distance four cars travel over time. Calculate the rate of change (slope) and then the unit rate of change for each car.



Car A: Car B: Car C: Car D:

b. Describe how the steepness of the line is related to the rate of change.

Day 3 – Y-intercepts
Practice Assignment

Name: _____
Date: _____ **Block:** _____

Calculate the y-intercept:

1.

x	y
8	−9
12	−12
16	−15
20	−18

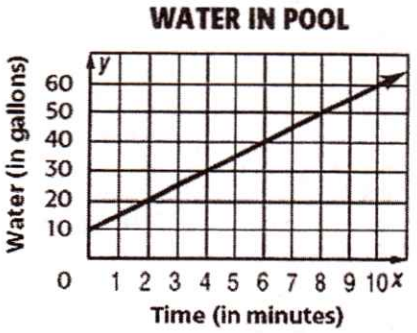
2.

x	y
6	35
9	53
12	71
15	89

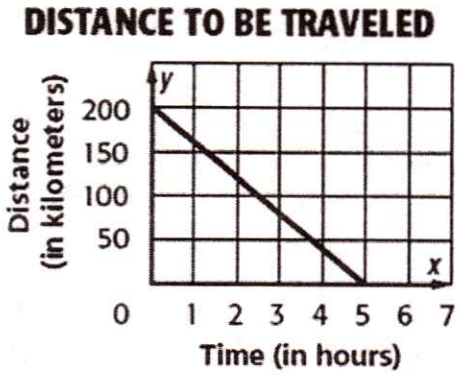
3. Josh received a gift card to the local movie theater. After going to 2 movies, the balance of her gift card dropped to $64. After going to 3 more movies, the balance of her gift card dropped to $40 remaining. What was her original gift card balance? Express your answer in real world terms and as a y-intercept.

4. The cost to shop a package in the mail includes a basic shipping charge plus an additional cost per number of pounds the package weighs. A three pound package costs $6.30 to shop. A ten pound package costs $14 to shop. What is the cost per pound and what is the basic shipping charge?

5. Ryan is adding water to his swimming pool. The graph below shows the amount of water in the pool as more water is added. How fast is Ryan adding water to the pool? How many gallons were in the pool to start?



6. Frank is planning to drive his car on the Overseas Highway, the scenic road that connects the islands in the Florida Keys to the Florida mainland. Calculate the slope and y-intercept and interpret what they mean according to the problem scenario.



7. The graph below represents Sarah's monthly phone charge; a monthly fee plus a charge for each minute she uses her phone. How much is the monthly fee and how much does she pay per minute?