Assignment Record Sheet

Math Core B

Full Name: _____ **Week: 1/20-1/24**

Unit Name: Variables and Patterns Period: 2

Date Assigned	Focus Question??	Homework (IP=in packet)	Meets Expectation (15 points)	Approaching Expectations (5 points)	Below Expectation (0 points)
Monday Jan. 20		**NO SCHOOL Martin Luther King Jr. Day**	**WU:** **CW:** **HW:**		
Tuesday Jan. 21	*How do you calculate average speed for a trip? How do a table or a graph show speed?*	**WU:** Math Practice Worksheet **CW:** Check Up 1 Review (IP) **HW:** Study for Quiz	**WU:** **CW:** **HW:**		
Wed. Jan. 22	*How do you calculate average speed for a trip? How do a table or a graph show speed?*	**WU:** None **CW:** Check Up 1 Quiz **HW:** None	**WU:** **CW:** **HW:**		
Thursday Jan. 23	*How are the relationships between independent and dependent variables different in tables and graphs?*	**WU:** Video Launch **CW:** Prob. 2.2 A-B (IP) **HW:** ACE #4 p. 78	**WU:** **CW:** **HW:**		
Friday Jan. 24	*How are the variables tour income and tour profit related to each other? How do you plot data points with one or both coordinates negative?*	**WU:** None **CW:** Prob. 2.3 A-C (IP) **HW:** None **Turn in your packet**	**WU:** **CW:** **HW:**		

Total Homework Score for the Week: _____/60

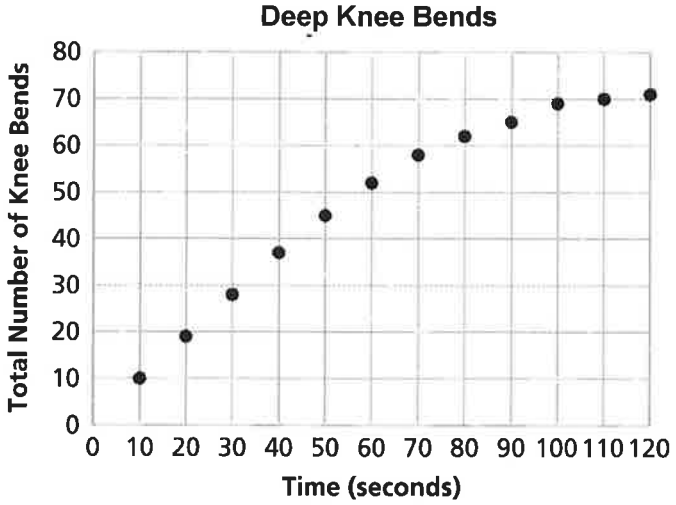
Daily Materials Score _____/20

CW

Name ..... Date 1/21/20 Class Per. 2

Check Up 1 Review for use after Investigation 1

1. Stefan did an experiment similar to the jumping jack exercise. He collected data on the number of deep knee bends a person could do in 2 minutes. The graph below shows his data.



a. What are the two variables?

b. Make a table of Stefan's data.

c. Describe in detail the pattern of how the number of deep knee bends changes as time increases.

d. From Stefan's data, estimate the number of knee bends he did in 25 seconds and in 65 seconds. Explain how you made the estimate.

c/w

Name ..... Date 1/21/20 Class Per. 2

Check Up 1 Review (continued)

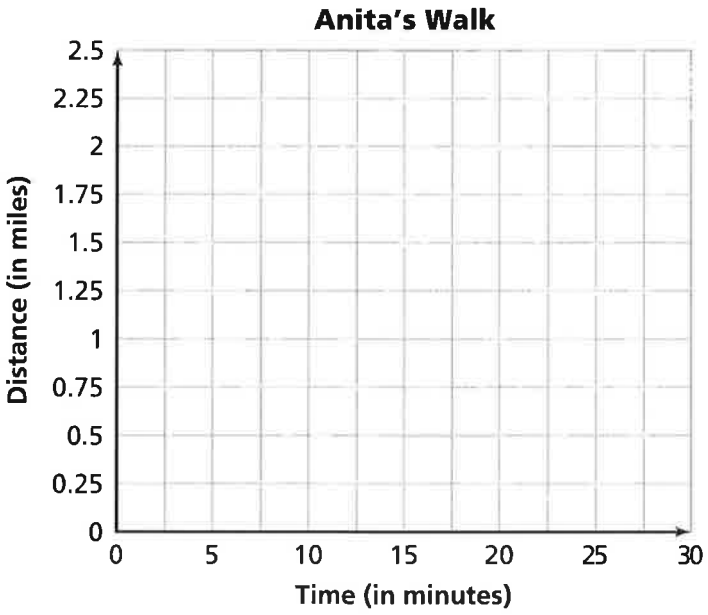
2. The table shows some data Anita collected while walking.

Anita's Walk

Time (minutes)	0	5	10	15	20	25	30
Distance (miles)	0	0.5	1	1.25	1.5	1.75	1.8

a. What are the two variables?

b. Graph the data on the axes below.



c. In what time periods did Anita make the most progress?

How does this show up in the table?

How does this show up in the graph?

d. In what time periods did Anita make the least progress?

How does this show up in the table?

How does this show up in the graph?

Name ..... Date c/w 1/23/20 Class Per. 2

Problem 2.2A Finding Customers

Prices That Customers Would Pay

Tour Price	$100	$150	$200	$250	$300	$350	$400	$450	$500
Number of Customers	40	35	30	25	20	15	10	5	0

A. 1. Make a graph of the data relating price and number of customers. Which is the independent variable and which is the dependent variable? Explain how you know.

2. How does the number of customers change as the price increases?

3. How is the change in number of customers shown in the table? How is the change shown in the graph?

4. How would you estimate the number of customers for a price of $175 or $325?

Name ..... Date clw 1/23/20 Class Per. 2

Problem 2.2B Predicting Income

B. 1. Complete the (*price, customers*) table to show how income from the tour is related to tour price and number of customers.

Predicted Tour Income

Price	$100	$150	$200	$250	$300	$350	$400	$450	$500
Customers	40	35	30	25	20	15	10	5	0
Income	$4000								

2. Make a graph of the (*price, income*) data.

3. Describe the pattern relating tour income to tour price with a sentence that begins, "As tour price increases, tour income. . . ." Explain why that pattern does or does not make sense.

clw

Name ..... Date 1/24/20 Class Per. 2

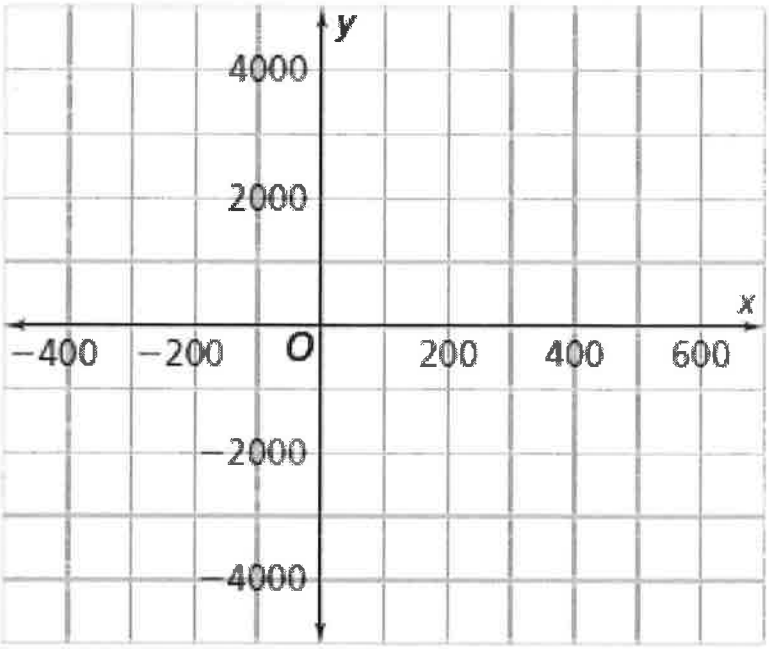
Problem 2.3A Predicting Profits

A. 1. Complete the following table.

Predicted Tour Profit

Price	Customers	Income	Cost	Profit or Loss
$100	40	$4,000	$6,000	–$2,000
$150	35			
$200	30			
$250	25			
$300	20			
$350	15			
$400	10			
$450	5			
$500	0			

2. Graph the (*price, profit*) data points from the table above.



Name ..... Date 1/24/20 Class Per. 2

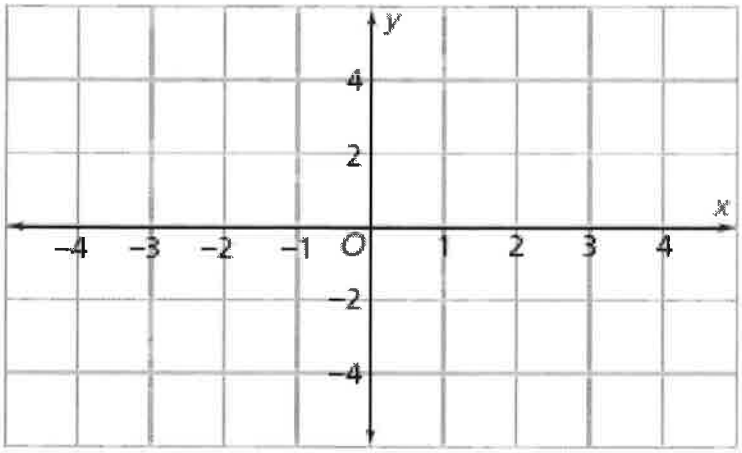
Problem 2.3B Graphing Data

B. In January the partners thought about offering a winter bike tour. They looked at the forecast temperatures for the next four days. For each day they wrote down the number of degrees above or below that day's average temperature. They used both positive and negative numbers. Then they checked what the temperatures had been for the previous five days. They recorded their data for all nine days in the table below.

x	–4	–3	–2	–1	0	1	2	3	4
y	–2	4	–3	1	–1	5	–3	–5	2

1. What do the x- and y-values represent?

2. Plot the pairs of (x, y) values in the table on a coordinate grid. Label each point with its coordinates.



3. Describe the pattern of change that relates the two variables.

c/w

Name ..... Date 1/24/20 Class Per. 2

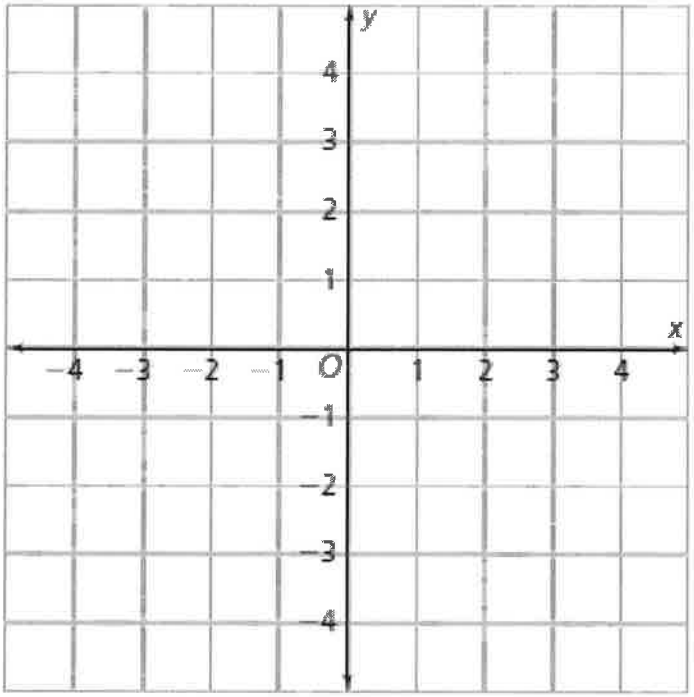
Problem 2.3C Moving From Point to Point

C. 1. You are at the point with coordinates (3, 4). Tell how you would move on the grid lines to reach the points with each of these coordinate pairs.

a. (–3, 4) **b.** (–3, –4)

c. (3, –4) **d.** (1.5, –2)

e. (–1.5, 2) **f.** (–2.5, –3.5)



2. How far would you have to move on the grid lines to travel between each of pair of points?

a. (3, 4) to (–3, 4) **b.** (3, 4) to (3, –4) **c.** (3, 4) to (–3, –4)