

# Homework #19

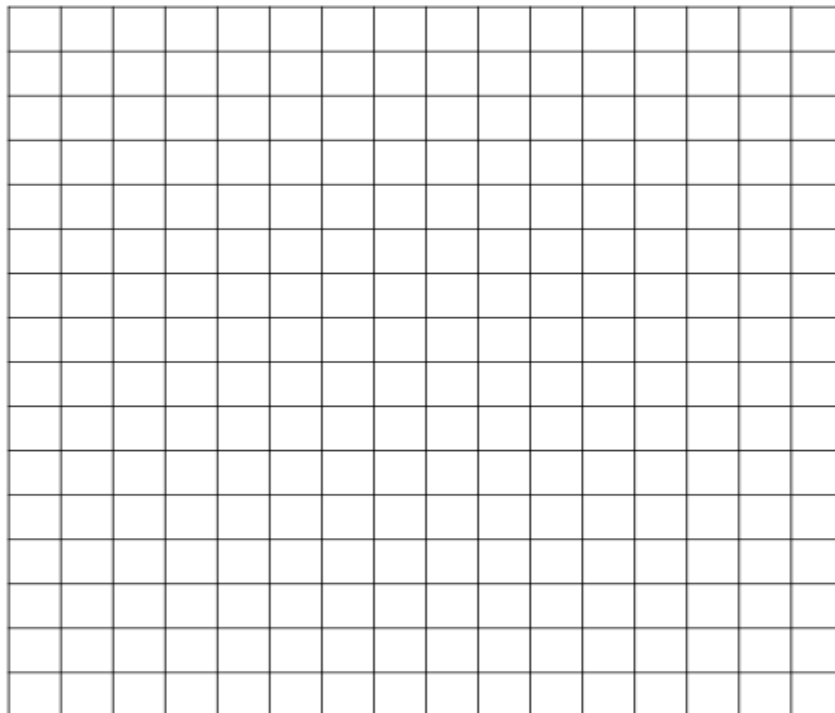
Due Friday, Feb. 14

Name \_\_\_\_\_  
Buckley or Gietzen

1. To raise money, students plan to hold a car wash. They ask some adults how much they would be willing to pay for a car wash. The table below shows the results of their research.

<b>Car Wash Price</b>	\$4	\$6	\$8	\$10	\$12	\$14
<b>Number of Customers</b>	120	105	90	75	60	45

a. Make a coordinate graph of the (price, customers) data.



b. Describe the pattern relating the price to the number of customers:

***“As the price of the car wash increases, the number of customers \_\_\_\_\_”***

c. Based on the pattern, what **number of customers** would you *predict* if the price were \$16, \$20, or \$2?

\$16: \_\_\_\_\_

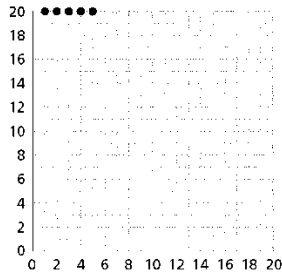
\$20: \_\_\_\_\_

\$2: \_\_\_\_\_

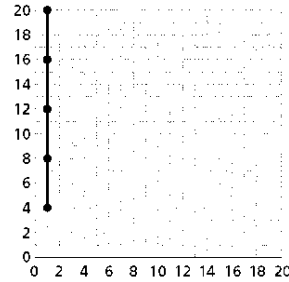
2. MULTIPLE CHOICE: Which graph best represents the table below? **Circle** the correct answer below.

Perimeter	4	8	12	16	20
Length of Side of a Square	1	2	3	4	5

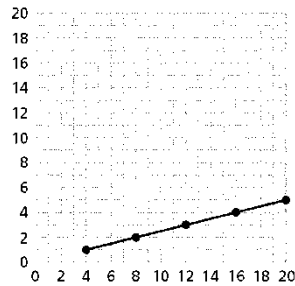
a.



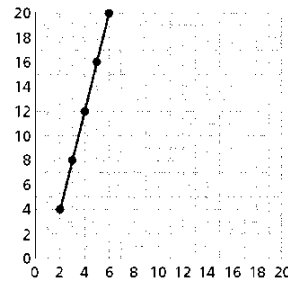
b.



c.



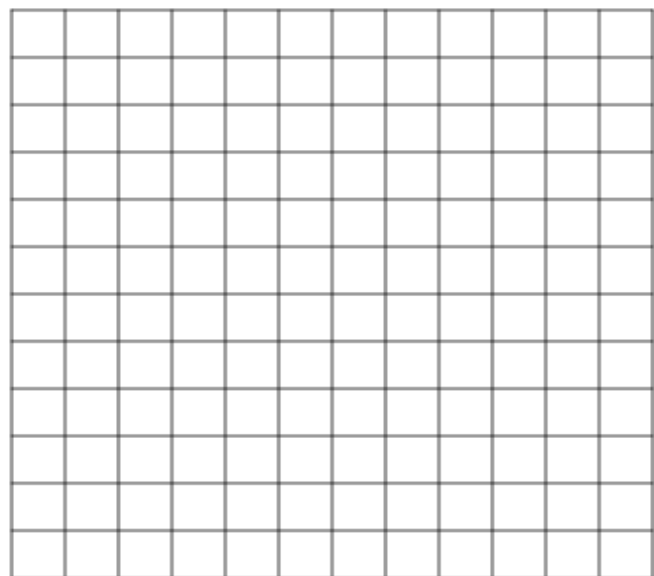
d.



3. Edru Roller Rink rents roller blades for **\$3 per skater**. Counting up by 5 skaters, make a table showing the total rental charge for 0 to 40 skaters. Make a coordinate graph of your data.

# of Skaters	Total Rental Charge
0	\$0
5	\$15
	\$30
20	
	\$75
40	

Total Rental Charge



Number of Skaters

4. Jessi is trying to complete the bike tour at a steady (constant) rate. Her speed is **8 miles per hour**.

- a. Fill in the rest of this **table** that shows the *distance* traveled every *hour*, up to 8 hours, if she is able to ride at this constant speed.

<b>Hour</b>	<b>1</b>	<b>2</b>	<b>3</b>					<b>8</b>
<b>Miles</b>		<b>16</b>			<b>40</b>		<b>56</b>	

- b. How far would she travel in....

0.5 hour: \_\_\_\_\_ 9 hours: \_\_\_\_\_

3.5 hours: \_\_\_\_\_ 15 hours: \_\_\_\_\_

5. A camping-supply store rents camping gear for **\$25 per person**.

- a. Make a table of the total rental fee for 0, 2, 4, 7, 12, 15, and 20 campers.

<b>Numbers of Campers</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>7</b>	<b>12</b>	<b>15</b>	<b>20</b>
<b>Rental fee</b>	<b>\$0</b>		<b>\$100</b>				

- b. Describe the pattern of change in your table:

“As the number of campers \_\_\_\_\_ by 2, the rental fee increases by \_\_\_\_\_.”

- c. If I had 9 campers in my group, what would be my total cost? \_\_\_\_\_

- d. If I spent \$400, how many campers did I bring? \_\_\_\_\_

6. The following table shows typical weights for young tiger cubs from birth to 11 weeks. Use the data to answer parts (a)–(f).

Typical Weights for Tiger Cubs

Age (weeks)	Expected Body Weight (kg)
birth	1.3
1	2.3
2	3.0
3	3.8
4	4.5
5	5.2
6	6.0
7	6.7
8	7.5
9	7.6
10	8.9
11	9.7



- a. What weight is **predicted** for a 1-week-old tiger cub? \_\_\_\_\_
- b. What weight is **predicted** for a 10-week-old tiger cub? \_\_\_\_\_
- c. At what age do tiger cubs typically weigh *about* 7 kilograms? \_\_\_\_\_
- d. Label the **variables** (*age, weight*) on the coordinate graph above. ↑
- e. Plot the **data points** (from the table) on the graph above. ↑
- f. How would you describe the pattern relating tiger cub age and weight?

