Name:	Date:
UNIT 4	LESSON 6.5

**Do Now:** Determine if the correlation is positive, negative, or no.

- The weight of a steak and the price it costs. .\_\_\_\_\_
- The number of people in a limo to the prom and the cost of the limo per person.
- The cost of a movie ticket and the number of people in the audience. .\_\_\_\_\_

## AIM: GRAPHING SCATTER PLOTS

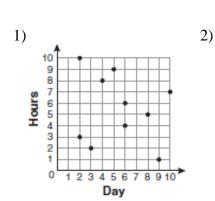
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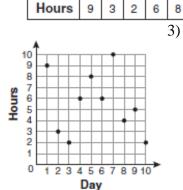
> 6 10

1. For 10 days, Romero kept a record of the number of hours he spent listening to music. The information is shown in the table below. Which scatter plot shows Romero's data graphically?

> 2 3

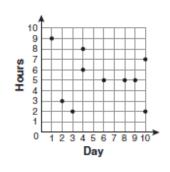
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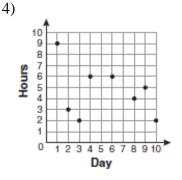




Day

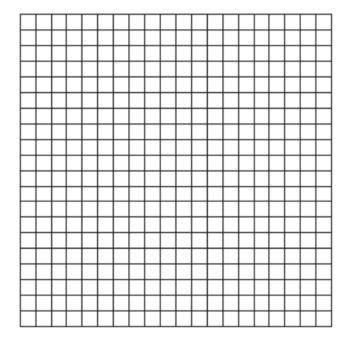
Hours





2. Let's decide if studying longer will affect Regents grades based upon a specific set of data.

<b>Study Hours</b>	Regents Score
3	80
5	90
2	75
6	80
7	90
1	50
2	65
7	85
1	40
7	100

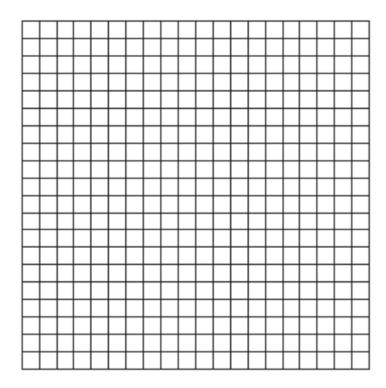


Describe it's correlation:

Does the data show causation? Explain:

3. During the months of February and March, the weekly number of jars of strawberry jam sold at a local market in New York was recorded. For the same time frame, the number of copies of a popular classical music CD sold in Florida was recorded. Let's examine this data.

Weekly Data Collection				
The jars of jam	The number of CDs			
5 jars	25 CDs			
7	30			
9	35			
10	42			
11	48			
11	52			
12	56			



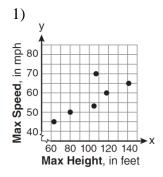
a.	Describe it's correlation:	
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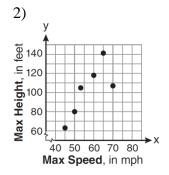
b.	Does the data show causation? Explain:	
	1	

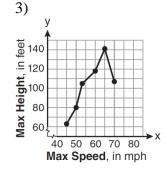
Just because there is a strong correlation between data, does not necessarily mean that one set of data is causing the affect that is occurring in the other set of data.

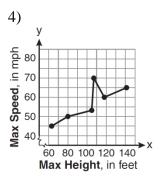
4. The maximum height and speed of various roller coasters in North America are shown in the table below. Which graph represents a correct scatter plot of the data?

Maximum Speed, in mph, (x)	45	50	54	60	65	70
Maximum Height, in feet, (y)	63	80	105	118	141	107



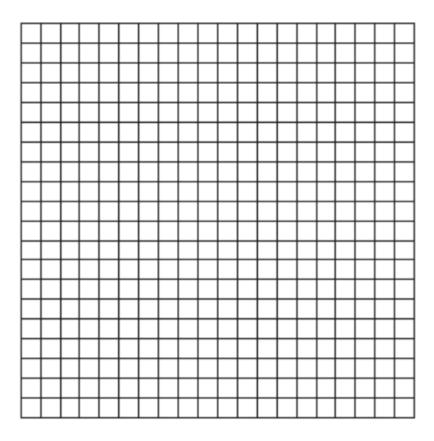






5. The school store did a study comparing the cost of a sweatshirt with the number of sweatshirts sold. The price was changed several times and the numbers of sweatshirts sold were recorded. The data are shown in the table below. Which scatter plot represents the data?

Cost of Sweatshirt	\$10	\$25	\$15	\$20	\$5
Number Sold	9	6	15	11	14



a.	Describe it's correlation:
b.	Does the data show causation? Explain: