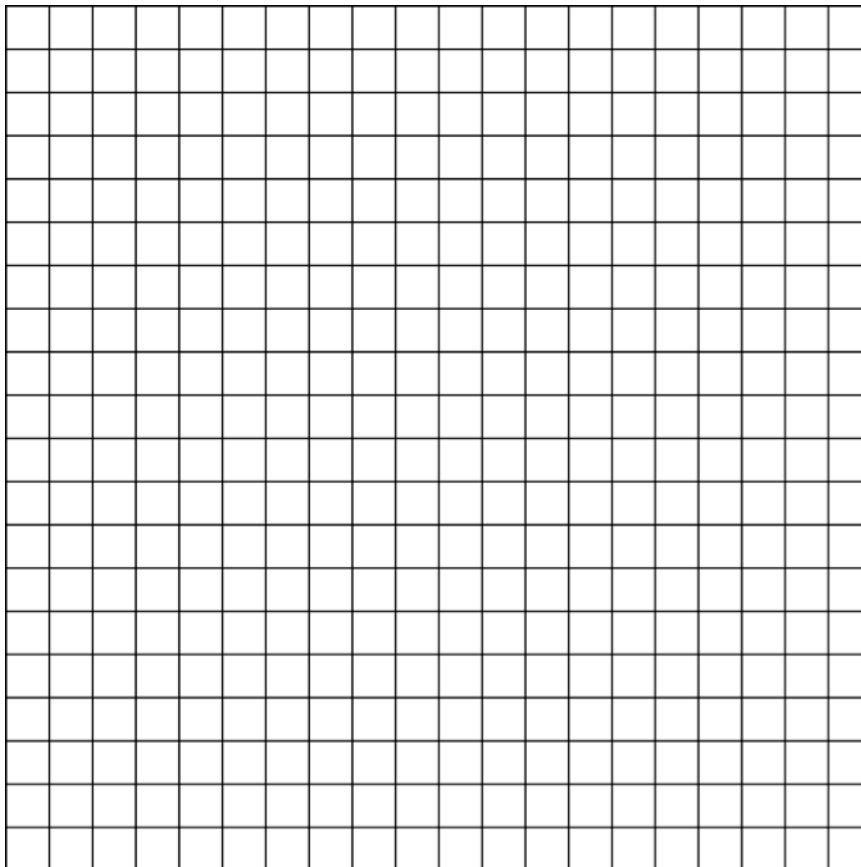# Exploring bivariate data
Block 3 Student Activity Sheet

1. Dakota has data on the number of views for 10 videos and the earnings on those videos.

| Views	1128	1351	1340	1459	1021	840	2375	782	1343	259
Earnings ($)	4.68	7.01	4.81	7.65	4.77	3.92	10.60	4.63	6.25	1.81

a. Create a scatterplot for the data.

b. What do you observe?

c. How does this relationship compare to the relationship you looked at with likes vs. earnings?

Exploring bivariate data
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2. Use the data on views and earnings to answer the following questions.

   a. Add a trend line to the graph you created in question 1.

   b. Use the graph to predict how much money Dakota might earn on a video with 88,000 views.

   c. One equation for a trend line is $y = 0.004x + 0.7$. What do the slope and y-intercept mean in this situation?

   d. Use the equation for the trend line to predict how much Dakota might earn on a video with 1,000,000 views.

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3. Compare the graph with a trend line for views vs earnings to the graph with a trend line of likes vs earnings. What do you notice? What does this mean?
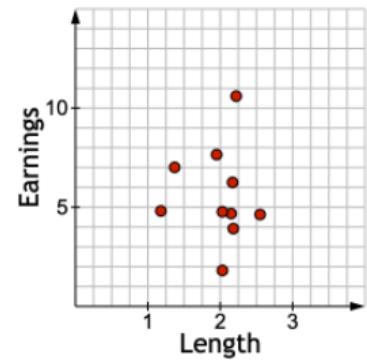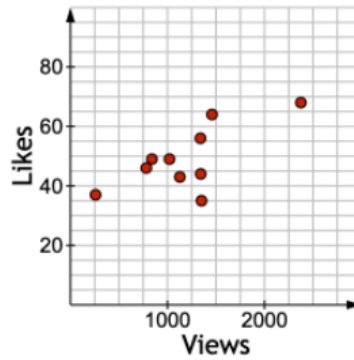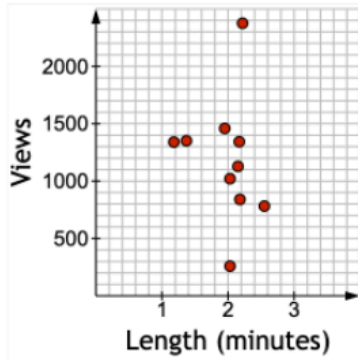

Likes vs Earnings

Views vs Earnings
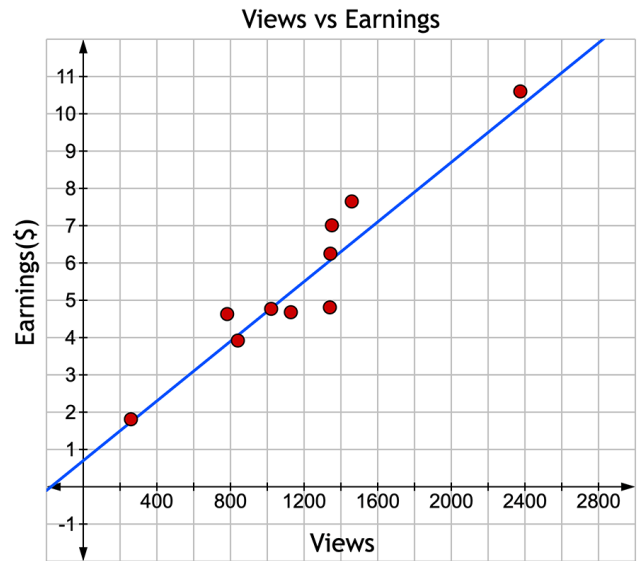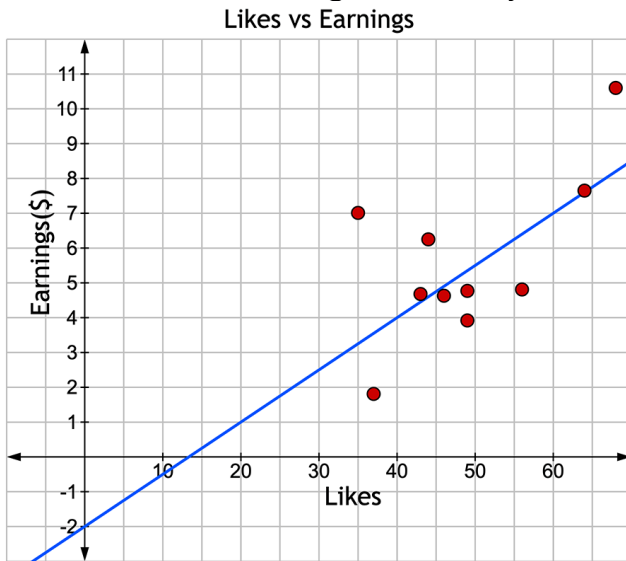
4. Dakota made $725 from her video with 88,000 views. How close was your prediction? Why do you think this is?

Exploring bivariate data
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5. Here are other graphs Dakota created between other variables. Describe what you see in each graph.

6. After looking at all the data Dakota graphed, what conclusions can you draw? What questions do these data raise for you? Are there other factors Dakota should consider if she's trying to increase the number of views she gets?