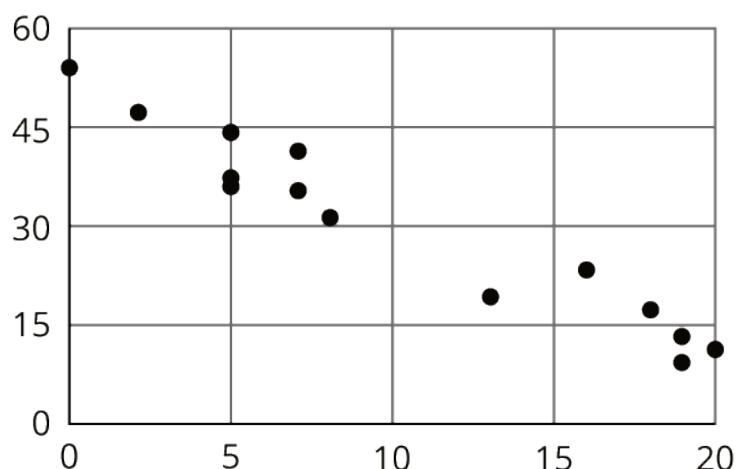


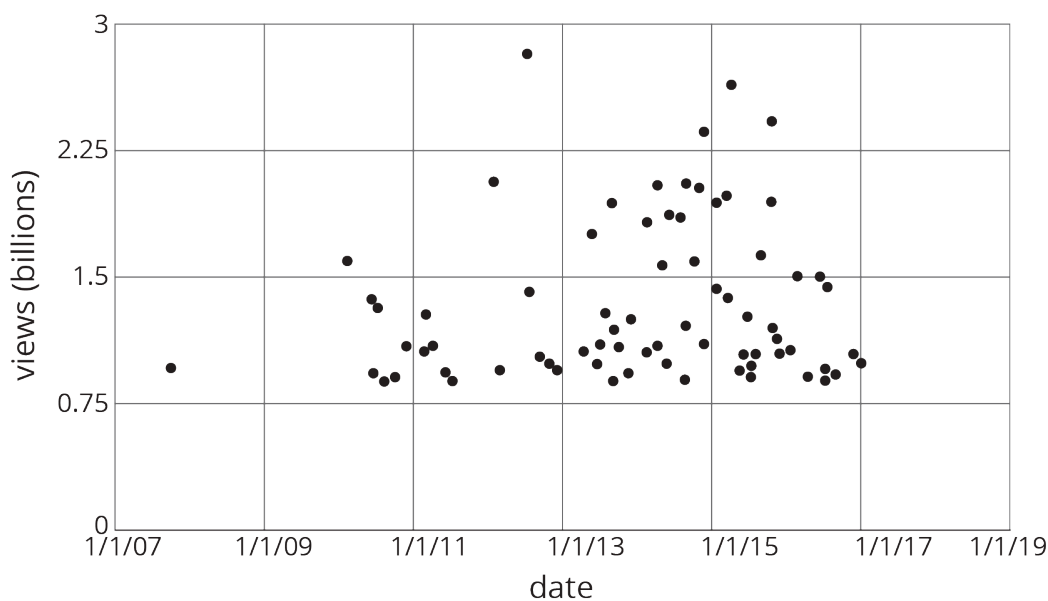
Lesson 20 Practice Problems

1. a. Draw a line that you think is a good fit for this data. For this data, the inputs are the horizontal values, and the outputs are the vertical values.



- b. Use your line of fit to estimate what you would expect the output value to be when the input is 10.

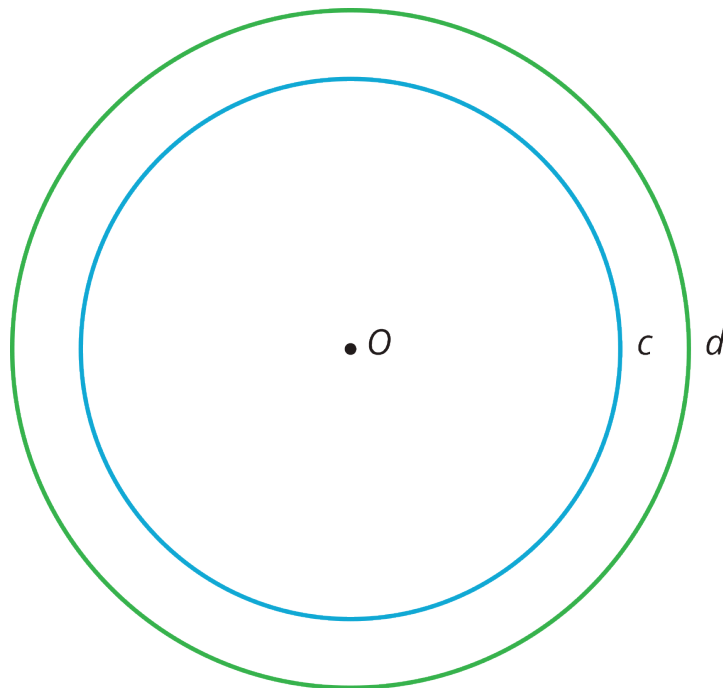
2. Here is a scatter plot that shows the most popular videos in a 10-year span.



- a. Use the scatter plot to estimate the number of views for the most popular video in this 10-year span.
- b. Estimate when the 4th most popular video was released.

(From Unit 5, Lesson 18.)

3. Here are Circles c and d . Point O is the center of dilation, and the dilation takes Circle c to Circle d .



- Plot a point on Circle c . Label the point P . Plot where P goes when the dilation is applied.
- Plot a point on Circle d . Label the point Q . Plot a point that the dilation takes to Q .

(From Unit 2, Lesson 9.)

4. Triangle A is an isosceles triangle with two angles of measure x degrees and one angle of measure y degrees.
- Find three combinations of x and y that make this sentence true.
 - Write an equation relating x and y .
 - If you were to sketch the graph of this linear equation, what would its slope be? How can you interpret the slope in the context of the triangle?

(From Unit 5, Lesson 11.)

5. Mai earns \$7 per hour mowing her neighbors' lawns. She also earned \$14 for hauling away bags of recyclables for some neighbors.

Priya babysits her neighbor's children. The table shows the amount of money m she earns in h hours. Priya and Mai have agreed to go to the movies the weekend after they have earned the *same* amount of money for the *same* number of work hours.

| h | m |
|-----|---------|
| 1 | \$8.40 |
| 2 | \$16.80 |
| 4 | \$33.60 |

- How many hours do they each have to work before they go to the movies?
- How much will each of them have earned?
- Explain where the solution can be seen in tables of values, graphs, and equations that represent Priya's and Mai's hourly earnings.

(From Unit 5, Lesson 12.)