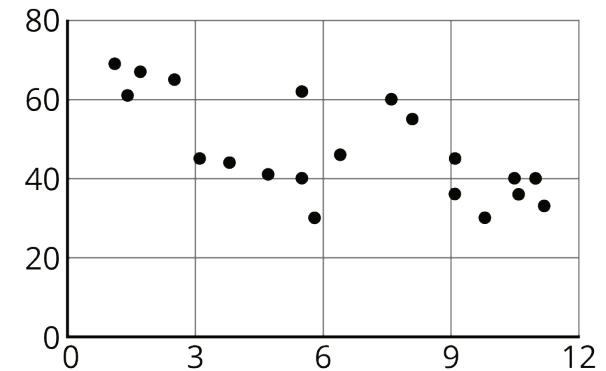
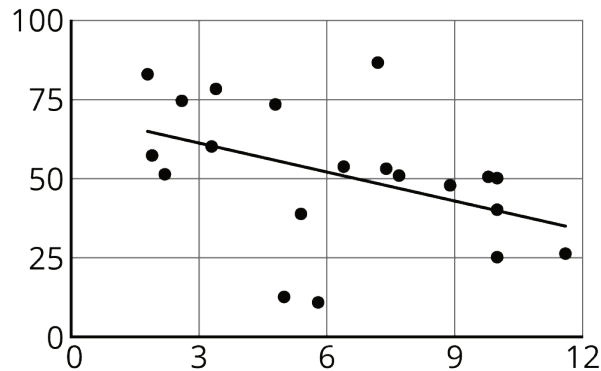
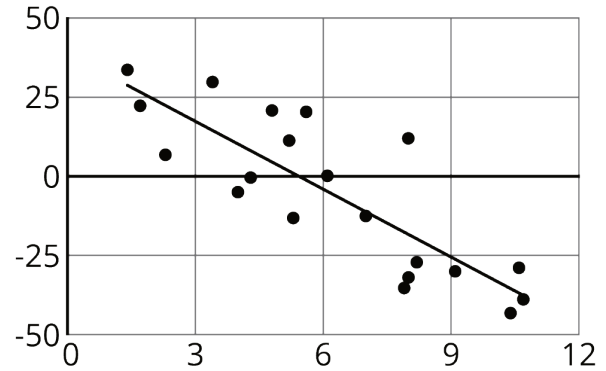
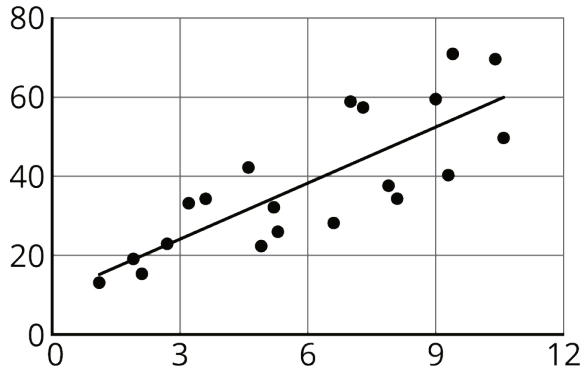


# Unit 5 Lesson 20: Describing Trends in Scatter Plots

## 1 Which One Doesn't Belong: Scatter Plots (Warm up)

### Student Task Statement

Which one doesn't belong?

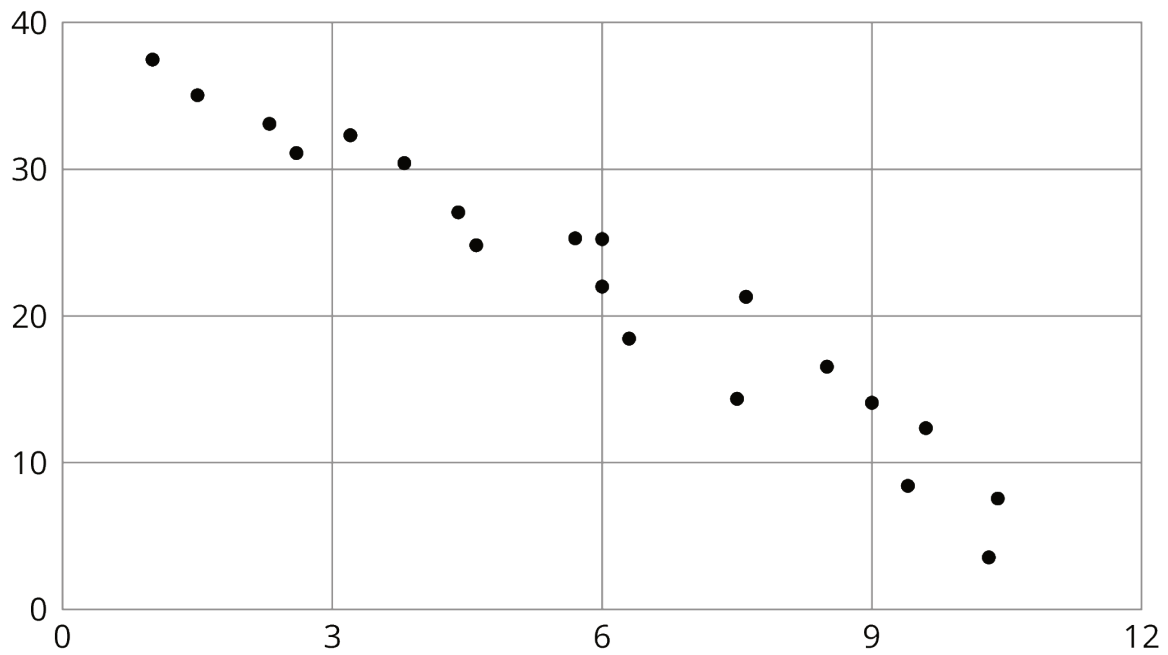
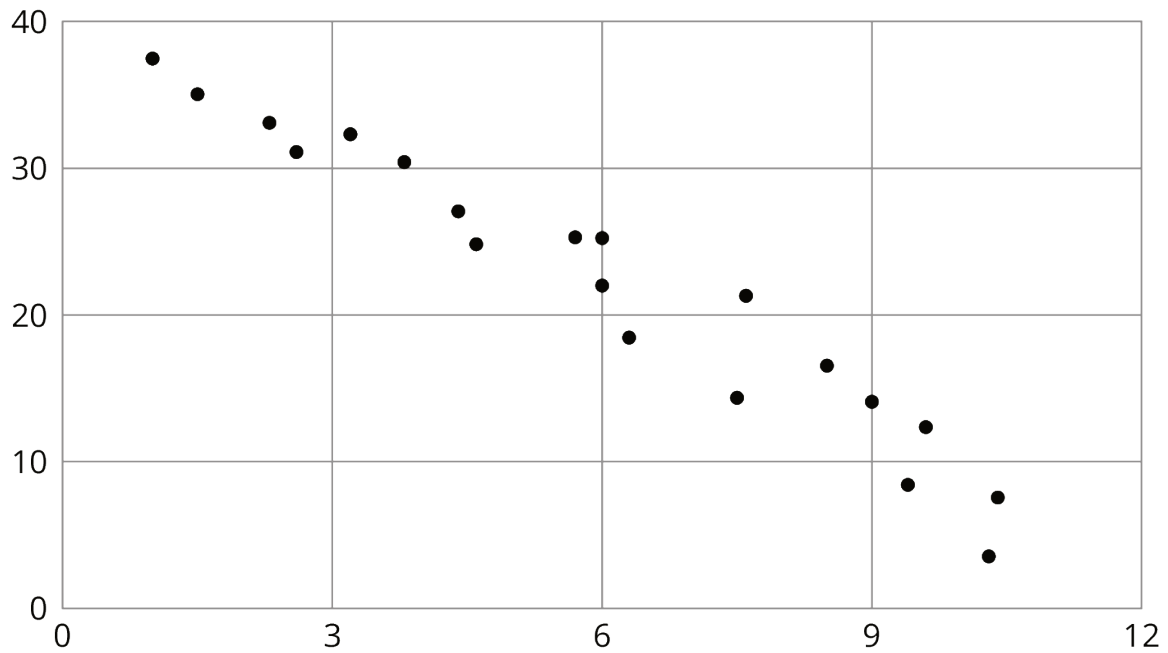


## 2 Fitting Lines

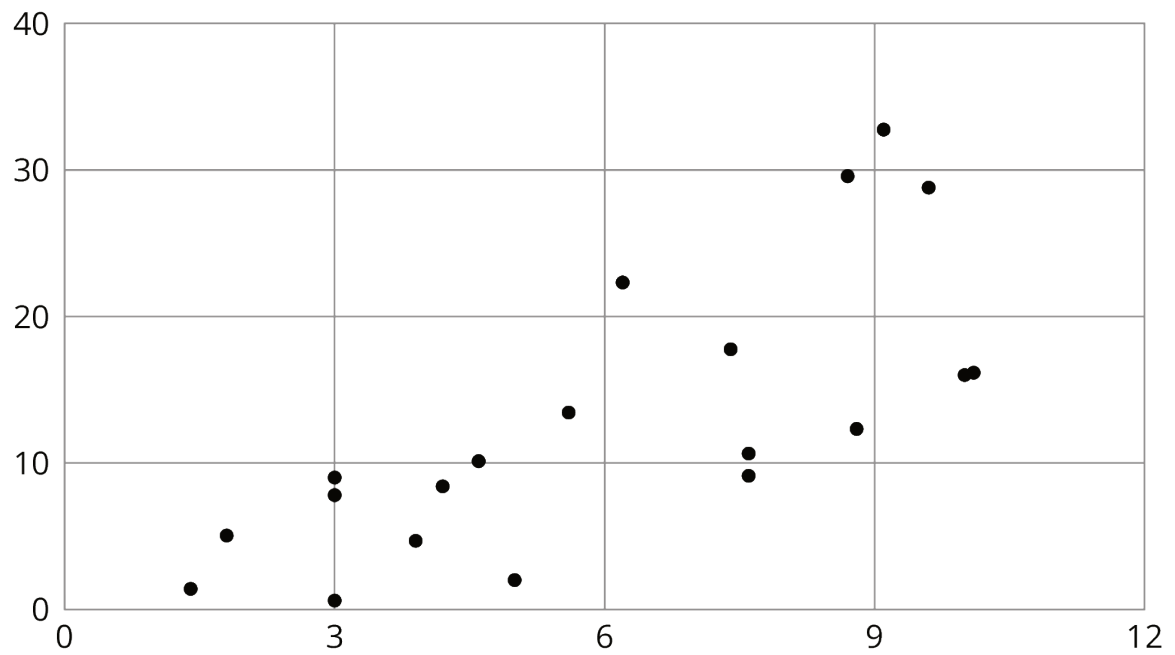
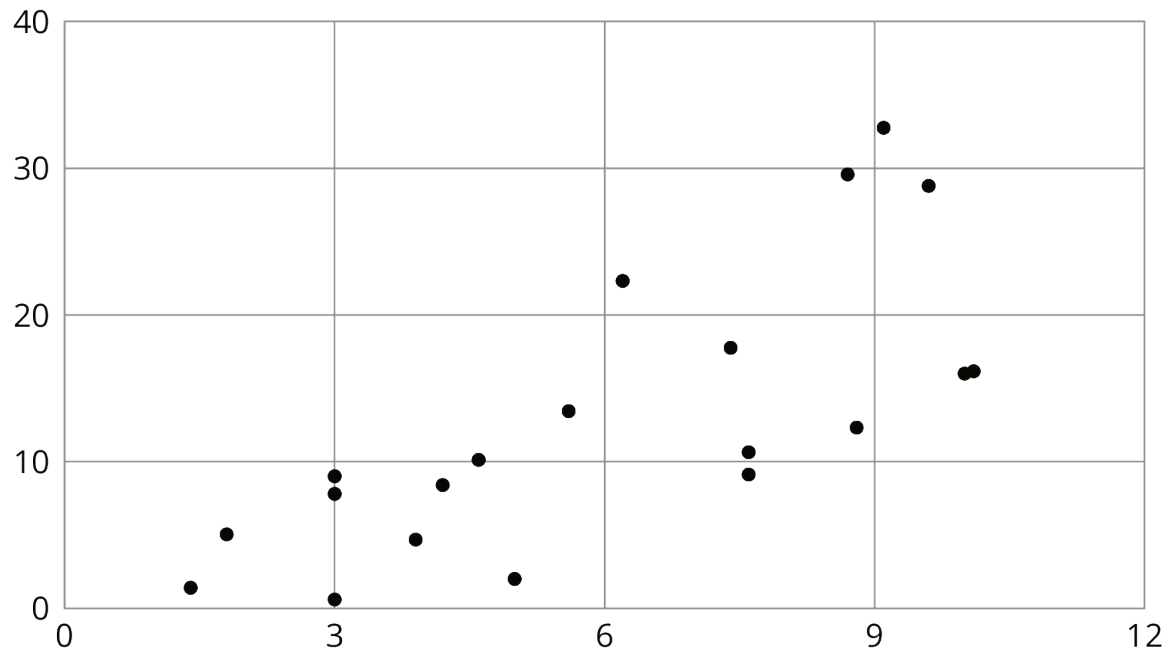
### Student Task Statement

Your teacher will give you a piece of pasta and a straightedge.

1. Here are two copies of the same scatter plot. Experiment with drawing lines to fit the data. Pick the line that you think best fits the data. Compare it with a partner's.

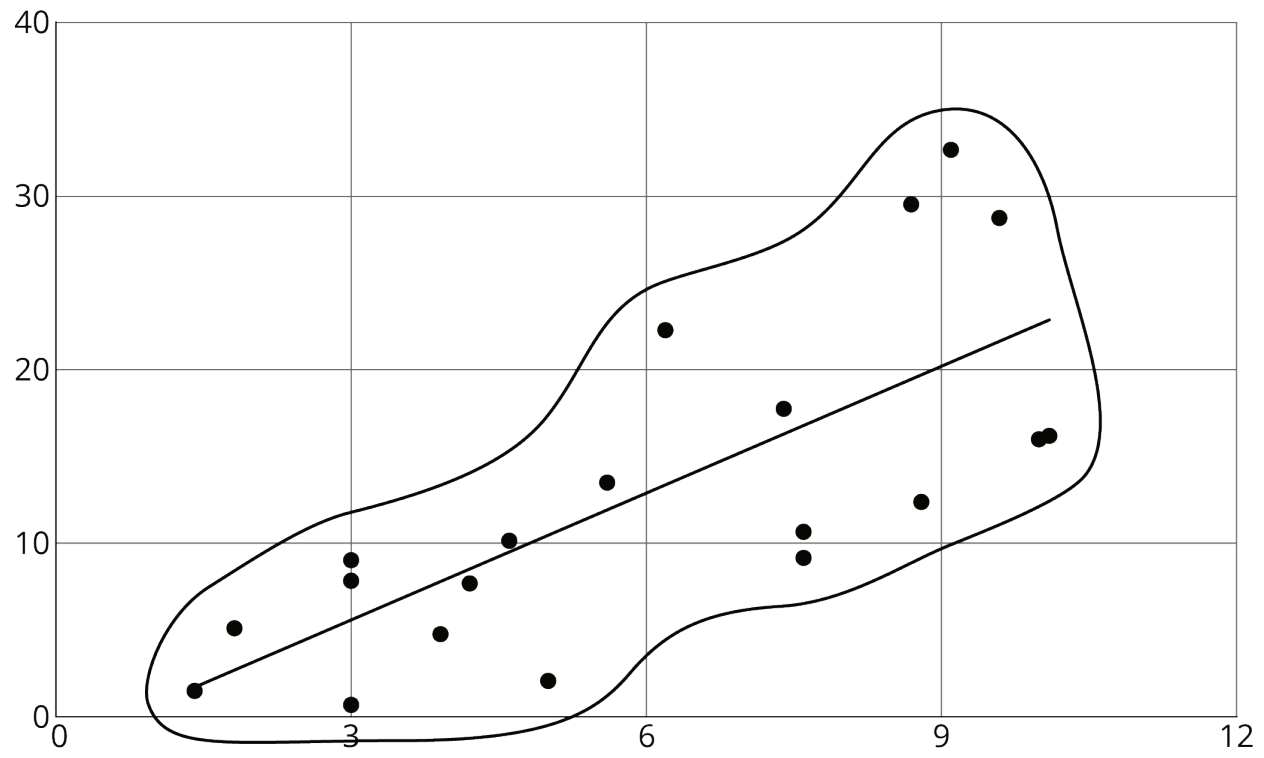


2. Here are two copies of another scatter plot. Experiment with drawing lines to fit the data. Pick the line that you think best fits the data. Compare it with a partner's.



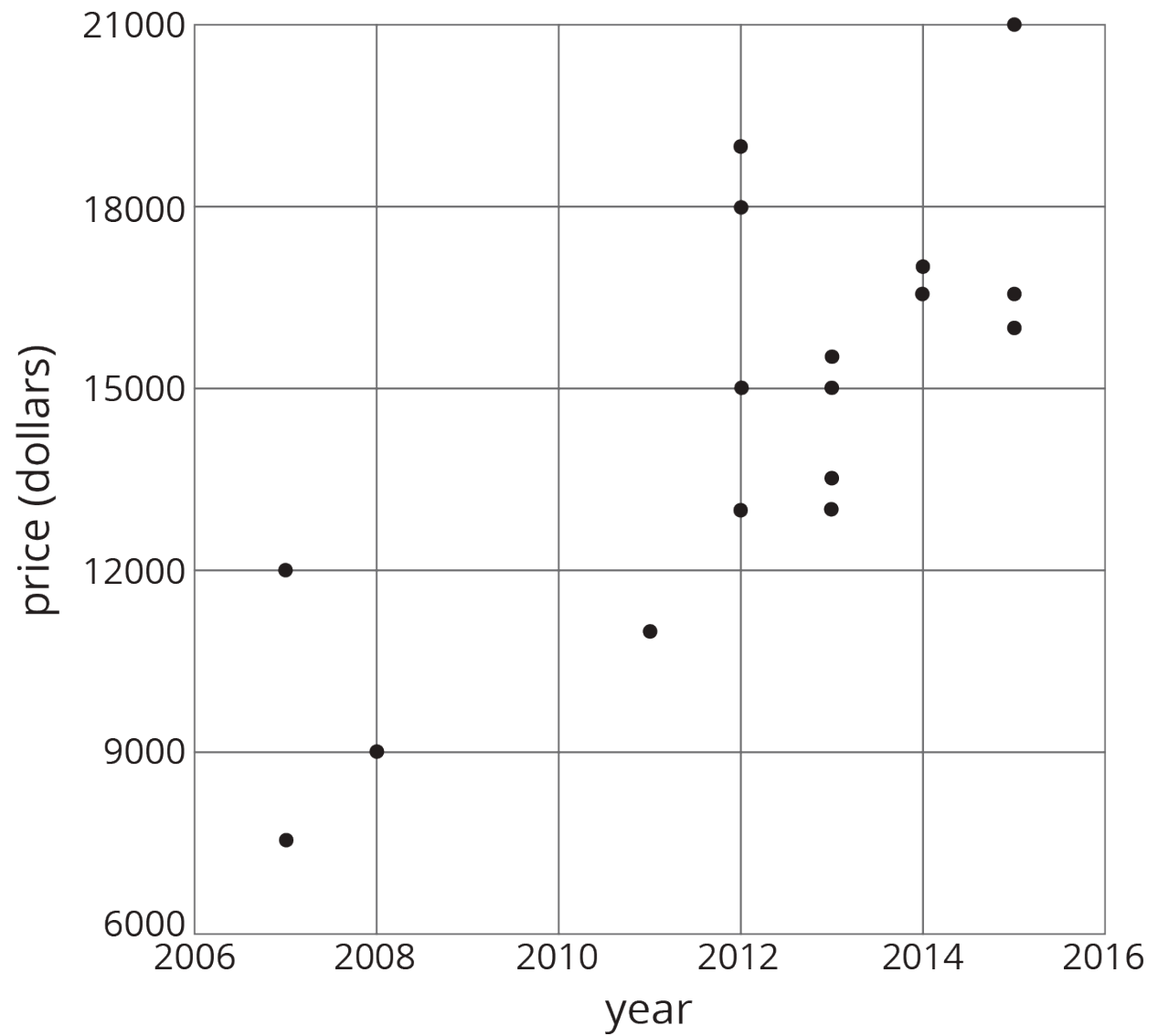
3. In your own words, describe what makes a line fit a data set well.

# Activity Synthesis



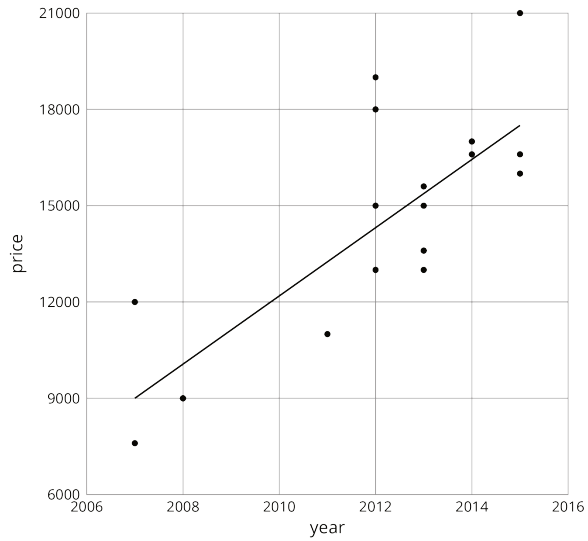
### 3 Good Fit Bad Fit (Optional)

Images for Launch

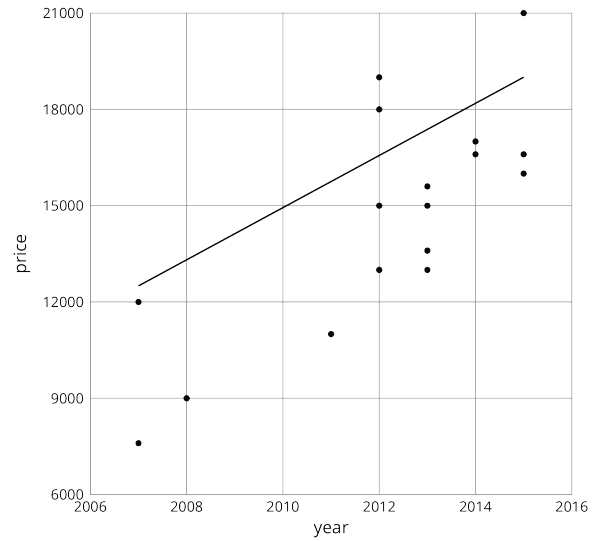


#### Student Task Statement

The scatter plots both show the year and price for the same 17 used cars. However, each scatter plot shows a different model for the relationship between year and price.



A



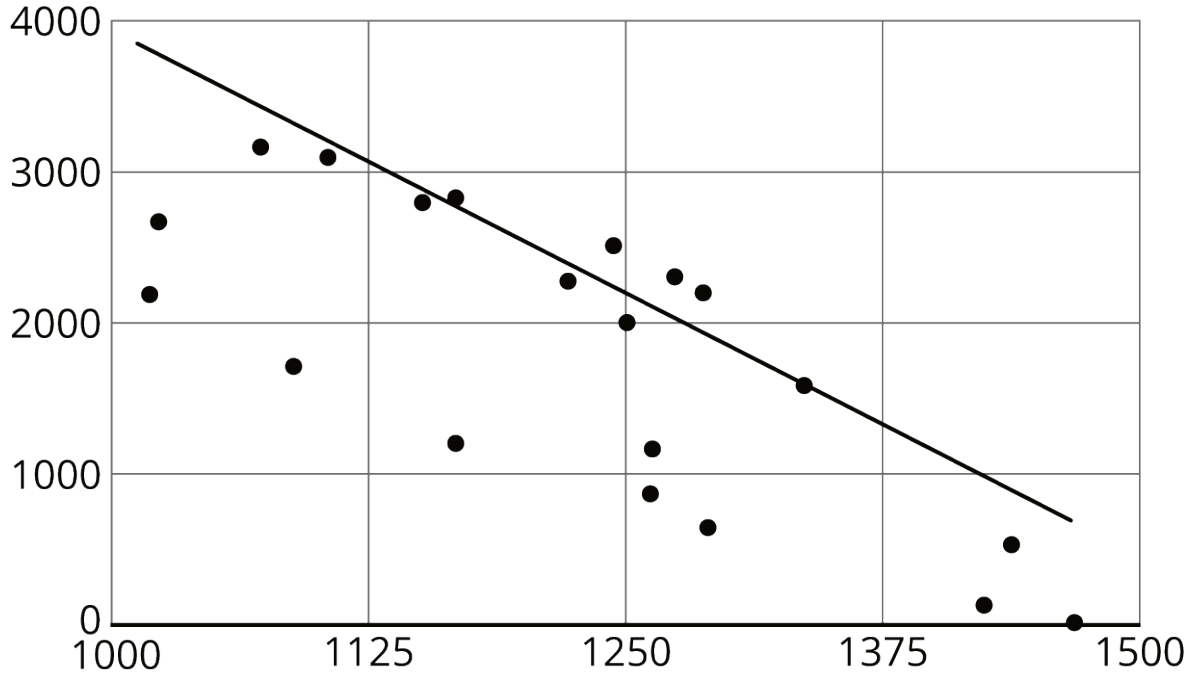
B

1. Look at Diagram A.
  - a. For how many cars does the model in Diagram A make a good prediction of its price?
  - b. For how many cars does the model underestimate the price?
  - c. For how many cars does it overestimate the price?
2. Look at Diagram B.
  - a. For how many cars does the model in Diagram B make a good prediction of its price?
  - b. For how many cars does the model underestimate the price?
  - c. For how many cars does it overestimate the price?
3. For how many cars does the prediction made by the model in Diagram A differ by more than \$3,000? What about the model in Diagram B?
4. Which model does a better job of predicting the price of a used car from its year?

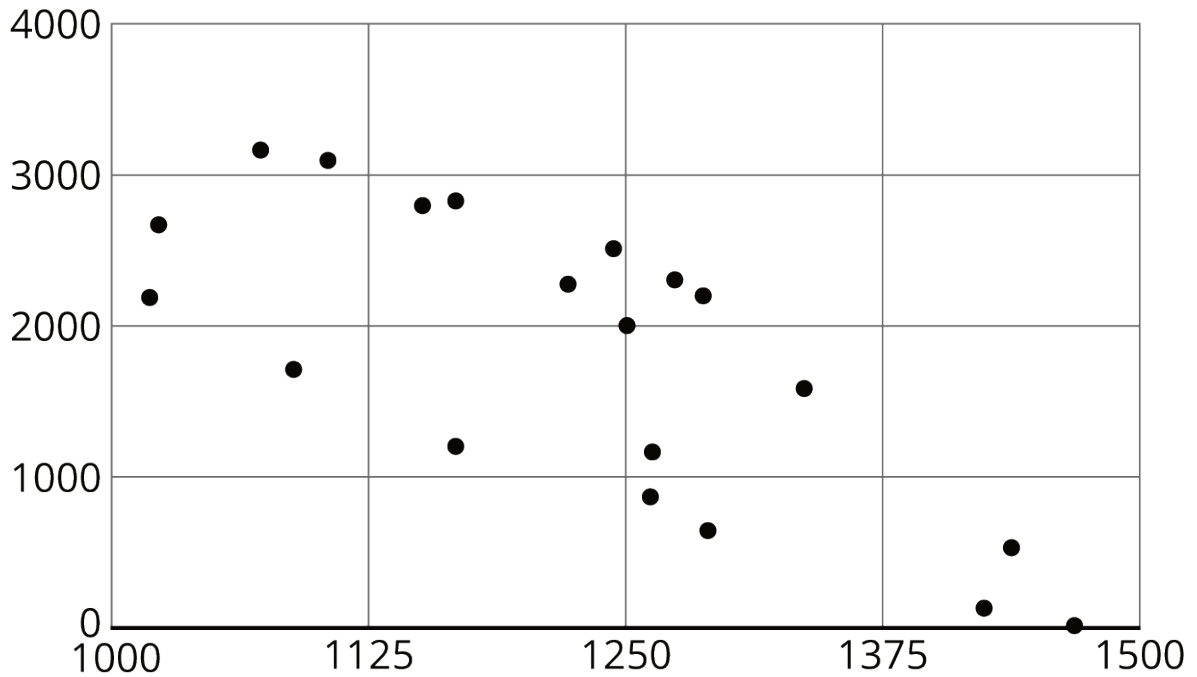
## 4 Practice Fitting Lines

### Student Task Statement

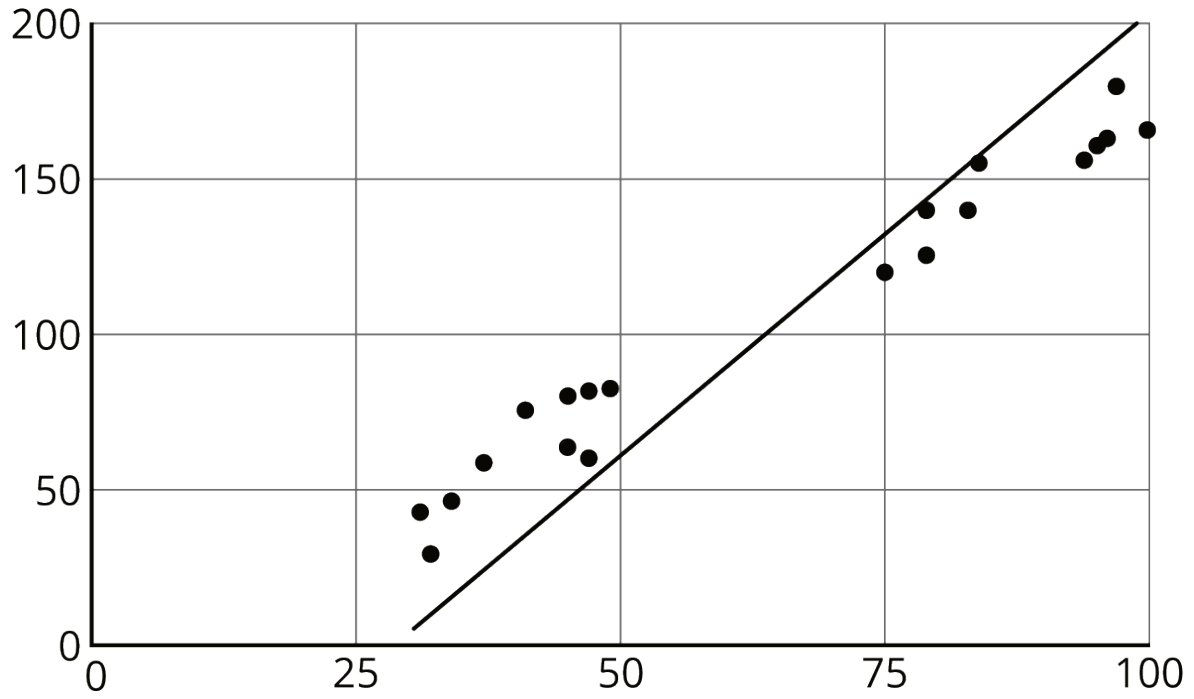
1. Is this line a good fit for the data? Explain your reasoning.



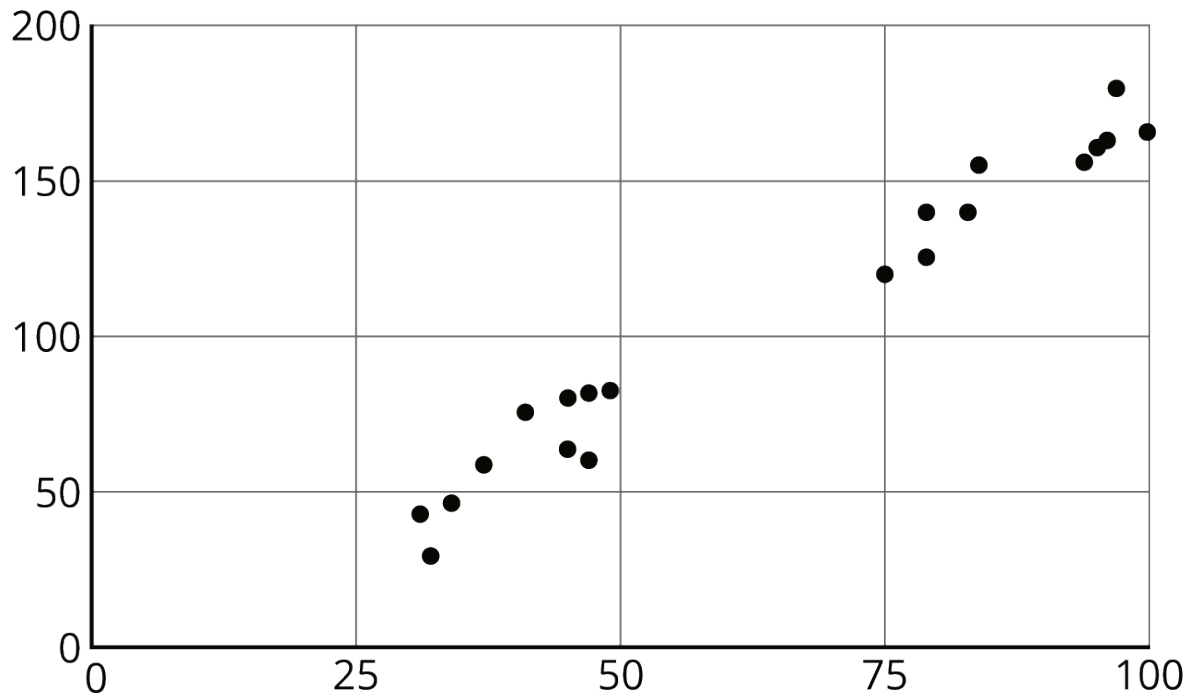
2. Draw a line that fits the data better.



3. Is this line a good fit for the data? Explain your reasoning.



4. Draw a line that fits the data better.





Images for Activity Synthesis

