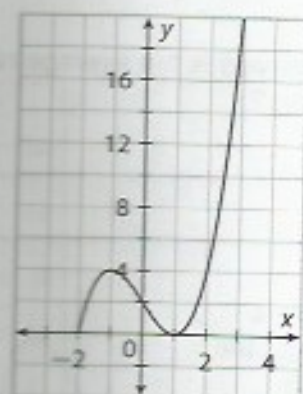


LESSON
1-2

Characteristics of Function Graphs

Practice and Problem Solving: A/B

Use the graph to answer Problems 1–4.



1. On which intervals is the function increasing and decreasing?

2. What are the local maximum and minimum values?

3. What are the zeros of the function?

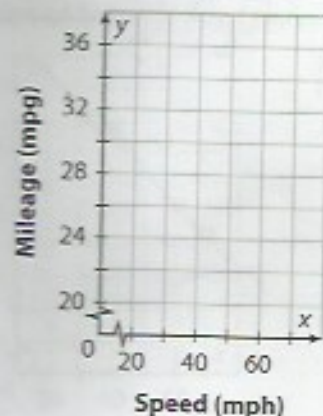
4. What is the domain and range?

Shelley is studying the relationship between her car's mileage (miles per gallon) and speed (miles per hour). The table shows the data Shelley found. Use the table for Problems 5–7.

Speed (miles per hour)	30	40	50	60	70
Mileage (miles per gallon)	34.0	33.5	31.5	29.0	27.5

5. Make a scatter plot of the data. Then use a calculator to find an equation for the line of best fit. Sketch the line.

Equation of line: _____



6. Use the equation found in Problem 5 to predict the miles per gallon of Shelly's car for a speed of 55 miles per hour.

7. Is the prediction found in Problem 6 an example of interpolation or extrapolation? Explain.
