2-5 Practice Scatter Plots and Lines of Regression

For Exercises 1 - 3, complete parts a-c.

- a. Make a scatter plot and a line of fit, and describe the correlation.
- b. Use two ordered pairs to write a prediction equation.
- c. Use your prediction equation to predict the missing value.
- **1. FUEL ECONOMY** The table gives the weights in tons and estimates the fuel economy in miles per gallon for several cars.

Weight (tons)	1.3	1.4	1.5	1.8	2	2.1	2.4
Miles per Gallon	29	24	23	21	?	17	15



Temperature Versus Altitude

8,000

9,000

Altitude (ft)

10,000

2. ALTITUDE As Anchara drives into the mountains, her car thermometer registers the temperatures (F) shown in the table at the given altitudes (feet).



3. HEALTH Alton has a treadmill that uses the time on the treadmill to estimate the number of Calories he burns during a workout. The table gives workout times and Calories burned for several workouts.

Time (min)	18	24	30	40	42	48	52	60
Calories Burned	260	280	320	380	400	440	475	?

2-6 Practice

Special Functions

Graph each function. Identify the domain and range.







7. g(x) = 2 |x|g (x) 0 X



4. $h(x) = \begin{cases} 3 \text{ if } x < -1 \\ x + 1 \text{ if } x > 1 \end{cases}$





