



Figure 14.7 How correlation measures the strength of a straight-line relationship. Patterns closer to a straight line have correlations closer to 1 or -1 .

- **Correlation measures the strength of only straight-line association between two variables.** Correlation does not describe curved relationships between variables, no matter how strong they are.
- Like the mean and standard deviation, **the correlation is strongly affected by a few outlying observations.** Use r with caution when outliers appear in the scatterplot. Look, for example, at Figure 14.8. We

Thought Question 3



Consider the two scatterplots below. How does the outlier impact the correlation for each plot?

- does the outlier increase the correlation, decrease the correlation, or have no impact?

