

# Chapter 9

## Review

# Do Now

Find the mean, median, mode, and range.

33, 76, 86, 92, 86

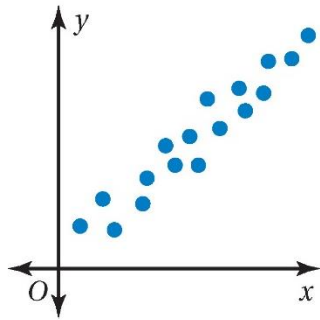
Mean = \_\_\_\_\_

Median = \_\_\_\_\_

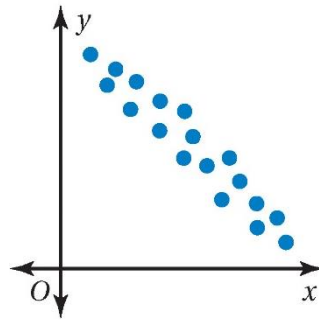
Mode = \_\_\_\_\_

Range = \_\_\_\_\_

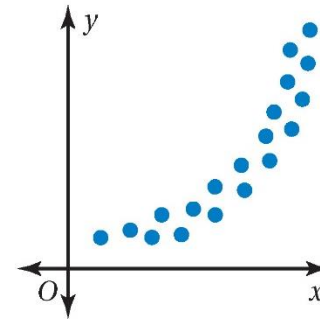
# Kinds of Scatter Plots



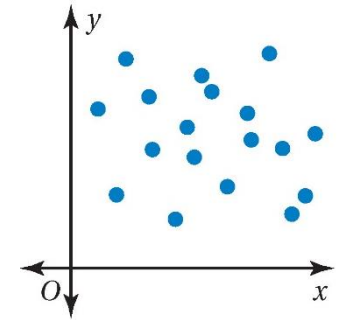
The points lie close to a line. As  $x$  increases,  $y$  increases.



The points lie close to a line. As  $x$  increases,  $y$  decreases.



The points lie in the shape of a curve.



The points show no pattern.



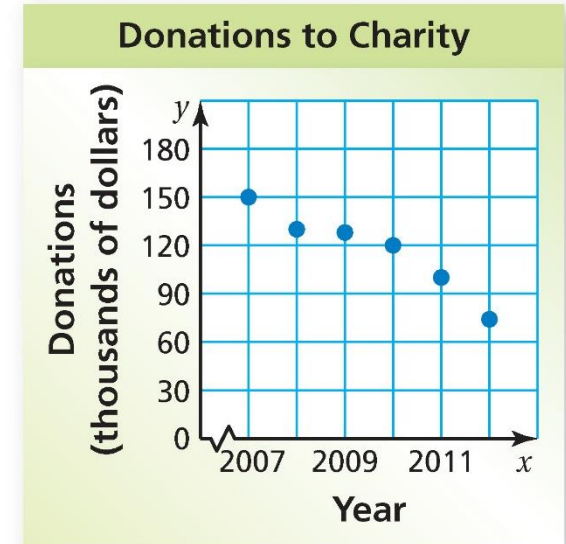
# 9.1 – Scatter Plots

1) **CHARITY** The scatter plot shows the amount of money donated to a charity from 2007 to 2012. (*Section 9.1*)

a. In what year did the charity receive \$150,000?

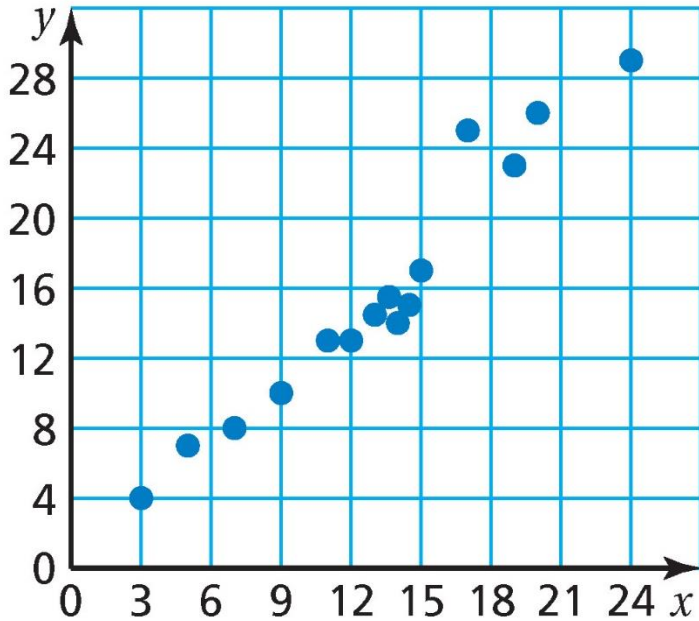
b. How much did the charity receive in 2010?

c. Describe the relationship shown by the data.



# 9.1 – Scatter Plots

2) Describe the relationship between the data. Identify any outliers, gaps, or clusters.



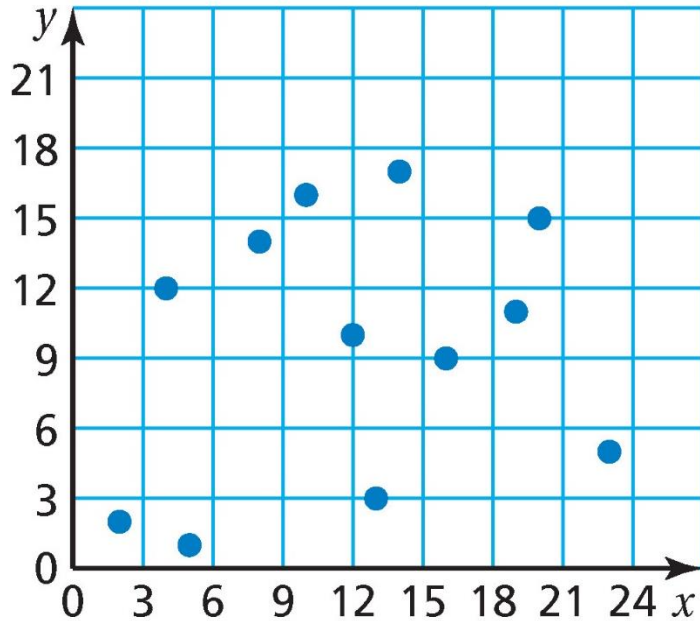
**Outliers**

**Gaps**

**Clusters**

# 9.1 – Scatter Plots

3) Describe the relationship between the data. Identify any outliers, gaps, or clusters.



**Outliers**

**Gaps**

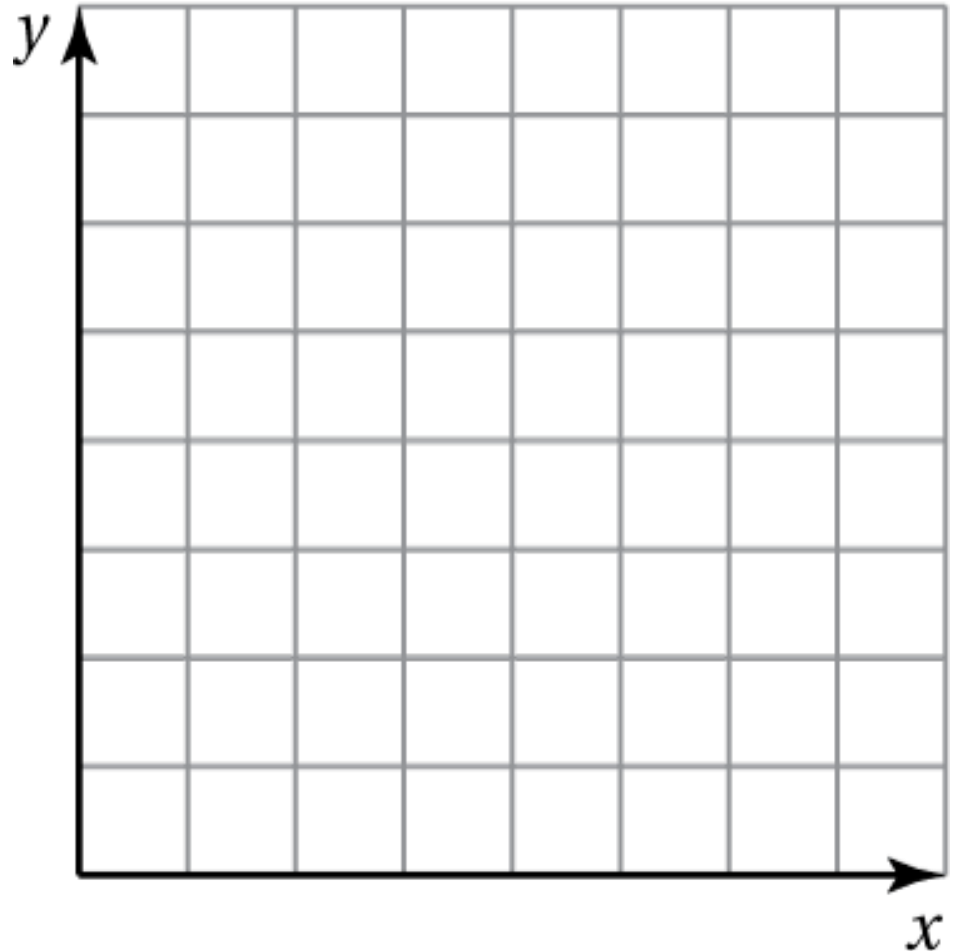
**Clusters**

# 9.2 – Lines of Fit

4) **BLUEBERRIES** The table shows the weights  $y$  of  $x$  pints of blueberries.

Number of Pints, $x$	0	1	2	3	4	5
Weight (pounds), $y$	0	0.8	1.50	2.20	3.0	3.75

- Graph the data in the table.
- Draw a line that you think best approximates the points.
- Write an equation for your line.



## 9.2 – Lines of Fit

4) **BLUEBERRIES** The table shows the weights  $y$  of  $x$  pints of blueberries.

Number of Pints, $x$	0	1	2	3	4	5
Weight (pounds), $y$	0	0.8	1.50	2.20	3.0	3.75

d) Use the equation to predict the weight of 10 pints of blueberries.

e) Blueberries cost \$2.25 per pound. How much do 10 pints of blueberries cost?



## 9.3 – Two Way Tables

- 5) **RECYCLING** The results of a recycling survey are shown in the two-way table. Find and interpret the marginal frequencies. (*Section 9.3*)

		Recycle	
		Yes	No
Gender	Female	28	9
	Male	24	14

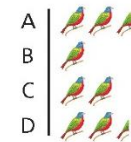
# 9.4 – Choosing a Data Display

**Data Display**

**What does it do?**

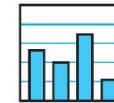
**Pictograph**

shows data using pictures



**Bar Graph**

shows data in specific categories



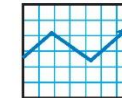
**Circle Graph**

shows data as parts of a whole



**Line Graph**

shows how data change over time



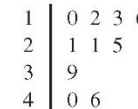
**Histogram**

shows frequencies of data values in intervals of the same size



**Stem-and-Leaf Plot**

orders numerical data and shows how they are distributed



**Box-and-Whisker Plot**

shows the variability of a data set by using quartiles



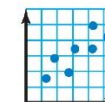
**Dot Plot**

shows the number of times each value occurs in a data set



**Scatter Plot**

shows the relationship between two data sets by using ordered pairs in a coordinate plane



## 9.4 – Choosing a Data Display

Choose an appropriate data display for the situation. **Explain your reasoning.**

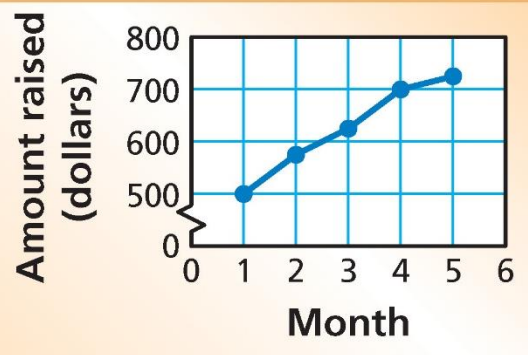
6) the percent of band students in each section of instruments

7) a company's profit for each week

# 9.4 - Choosing a Data Display

8)

Funds Raised for Class Trip



**FUNDRAISER** The line graph shows the amount of money that the eighth-grade students at a school raised each month to pay for a class trip. Is the graph misleading? Explain. *(Section 9.4)*