

10.1 Scatter Plots Day 1

TSW

- Construct a scatter plot given two sets of quantitative data.
- Identify patterns of association between two sets of quantitative data.
- Identify outliers in a scatter plot

Vocabulary-

Bivariate data-

Quantitative data-

Example:

Scatter Plot-

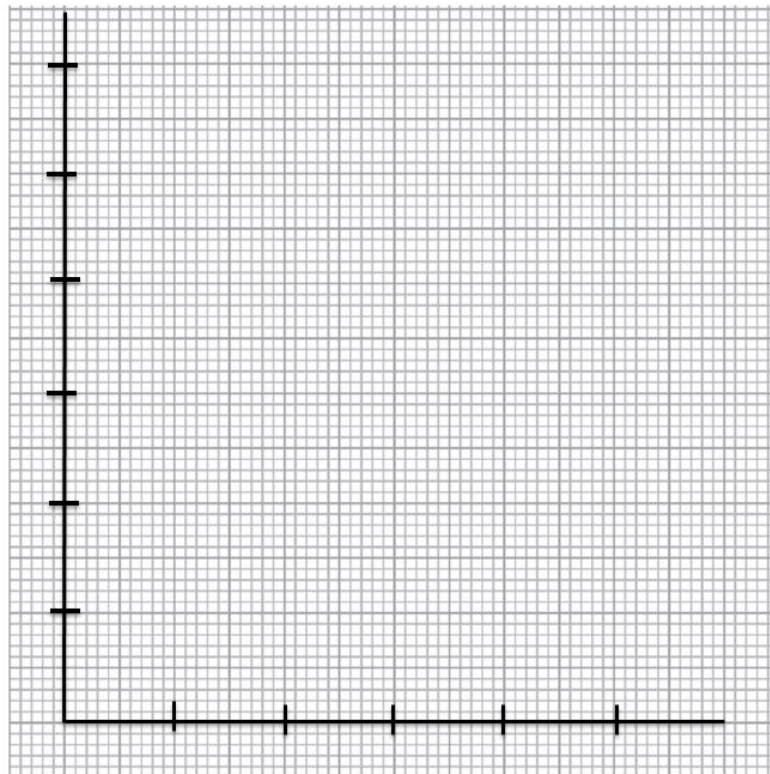
Example 1 Draw a scatter plot given a table of bivariate data.

The table shows the results of an experiment to determine the length, y centimeters, that a spring stretches when a mass of x grams is suspended from it.

Mass (g)	100	200	300	200	400	500	100	600	200
Length of spring (cm)	13.5	17.5	20.0	19.5	22.0	25.5	15.0	28.0	18.0

Mass (g)	300	400	100	400	200	100	600	300	500
Length of spring (cm)	20.5	21.5	16.0	22.5	18.5	15.5	27.0	21.0	25.0

Use 2 centimeters on the horizontal axis to represent 100 grams. Use 2 centimeters on the vertical axis to represent 5 centimeters. Draw a scatter plot of this data.



Guided Practice

Use graph paper.

- 1 The table shows some monetary exchanges between U.S. dollars, x dollars, and Japanese yen, y yen, over a time period of four months at a major airport.

U.S. Dollar	10	20	28	42	54	60	12	18	34
Japanese Yen (1,000s)	0.8	1.7	2.3	3.4	4.6	4.9	1.0	1.5	2.7

U.S. Dollar	36	48	54	34	52	18	12	26	44
Japanese Yen (1,000s)	3.1	3.8	4.5	2.9	4.2	1.4	0.9	2.0	3.6

Draw a scatter plot for these data. Use 2 centimeters on the horizontal axis to represent \$10. Use 2 centimeters on the vertical axis to represent 500 yen.

See additional Grid Paper