

Grade 6 - Statistical Questions and Data Displays - Worksheet

Common Core 6.SP.A.1, 6.SP.A.2, 6.SP.B.4, 6.SP.B.5a, 6.SP.B.5b · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

These 20 problems practice statistical questions and data displays (Common Core 6.SP.A.1, 6.SP.A.2, 6.SP.B.4, 6.SP.B.5a, and 6.SP.B.5b). You will identify statistical questions, read dot plots and histograms, count observations, describe shape, and name attributes and units.

Grade 6 · Common Core State Standards: **6.SP.A.1, 6.SP.A.2, 6.SP.B.4, 6.SP.B.5a, 6.SP.B.5b**

Exercise 1 - Statistical question?

Is "How many pets does each student in Mr. Lee's sixth-grade class have?" a statistical question? Explain.

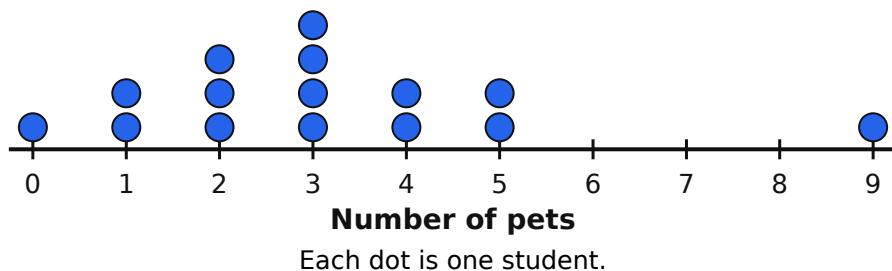
Exercise 2 - Not statistical

Is "How tall is Maya?" a statistical question? Explain.

Exercise 3 - Write a question

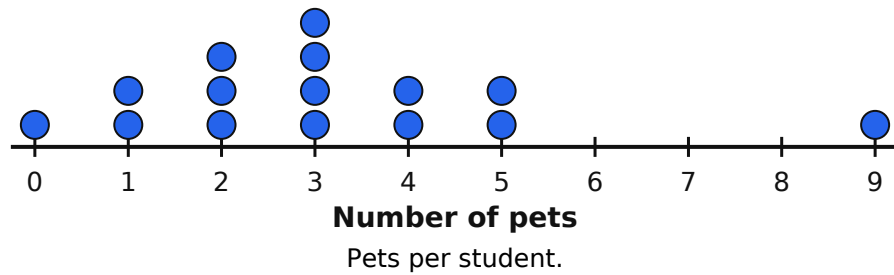
Write a statistical question about the lunches students bring to the school cafeteria. Tell what data you would collect.

Exercise 4 - Count observations



How many students are represented in the dot plot?

Exercise 5 - Most common value

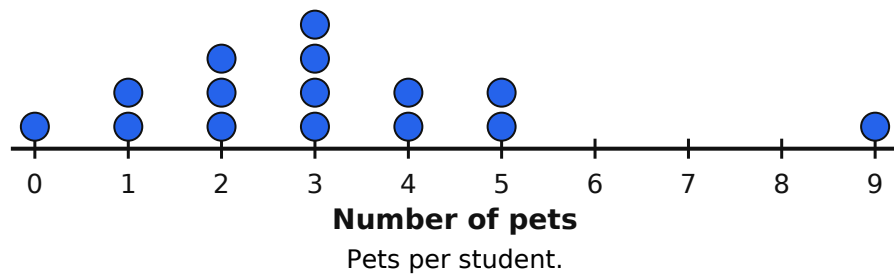


What number of pets is most common?

Exercise 6 - Range

Use the pets data set (0, 1, 1, 2, 2, 2, 3, 3, 3, 3, 4, 4, 5, 5, 9). Find the greatest value, the least value, and the range.

Exercise 7 - At least 4 pets



How many students have at least 4 pets? What fraction of the students is that?

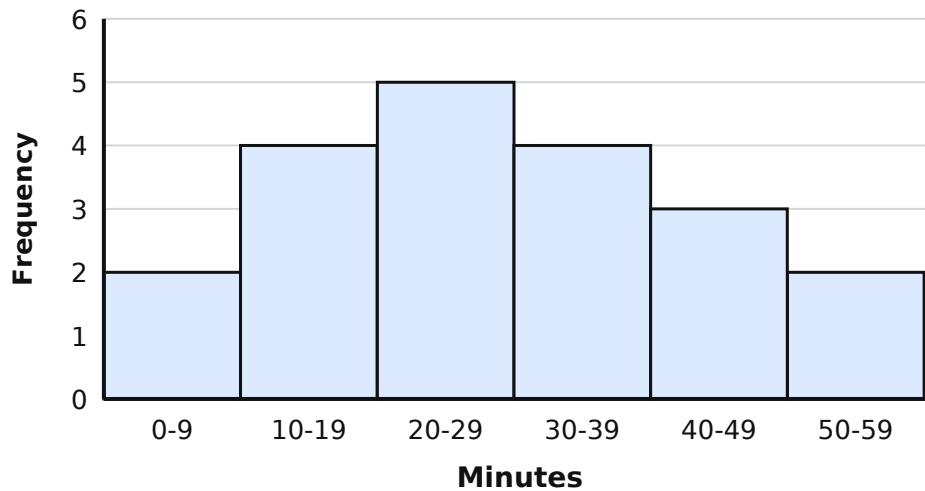
Exercise 8 - Make a dot plot

Make a dot plot for these 10 shoe sizes of sixth graders: 3, 4, 4, 5, 5, 5, 6, 6, 7, 9.

Exercise 9 - Frequency table

Make a frequency table for the number of books read by 12 students: 2, 3, 3, 4, 4, 4, 5, 5, 6, 8, 3, 4.

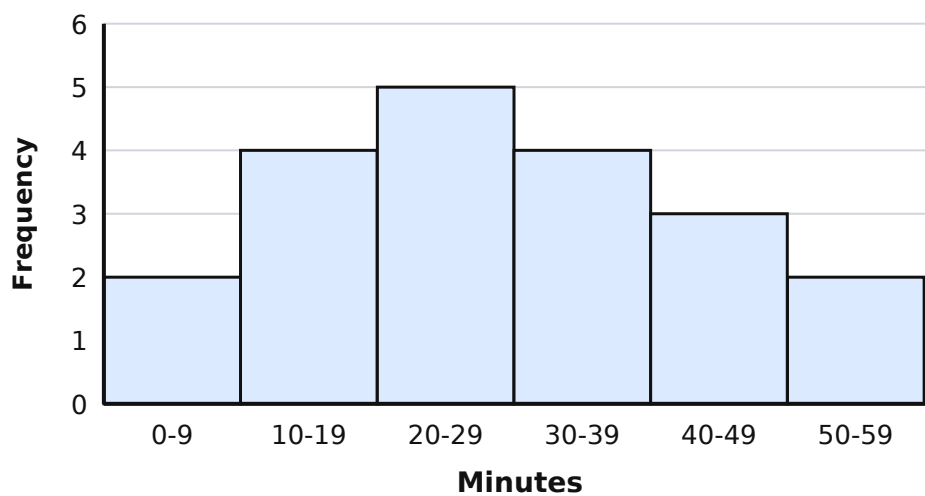
Exercise 10 - Read a histogram



Minutes of reading in one week.

How many students are represented in the histogram?

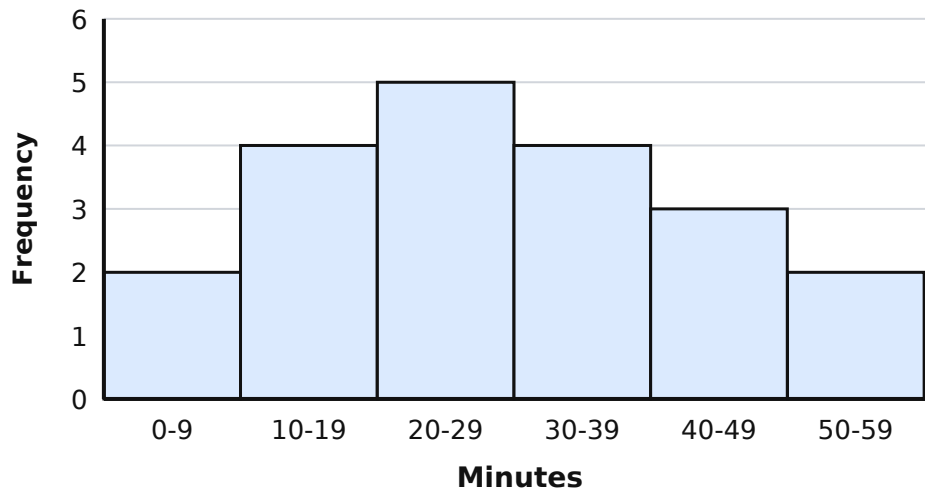
Exercise 11 - Tallest bar



Reading minutes.

Which interval has the most students? How many?

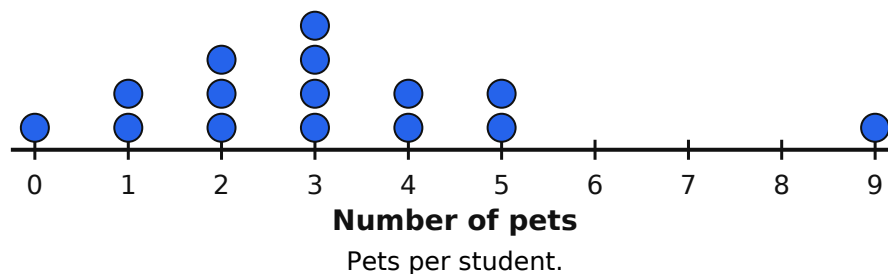
Exercise 12 - Combine intervals



Reading minutes.

How many students read for 30 minutes or more? What fraction of the class is that?

Exercise 13 - Describe the shape



Pets per student.

Describe the overall shape of the pets distribution: where it peaks, whether it is symmetric, and whether any value is far from the others.

Exercise 14 - Find an outlier

A set of times (minutes) to walk to school is 5, 6, 6, 7, 8, 8, 9, 10, 35. Which value is an outlier and why?

Exercise 15 - Attribute and unit

A class measures the height of 20 bean plants in centimeters after two weeks. Name the attribute that is measured, the unit, and the number of observations.

Exercise 16 - How the data were gathered

Jamal records the number of minutes each of 25 students took to finish a math quiz, using the

classroom clock. Describe the data: the attribute, the unit, and how it was measured.

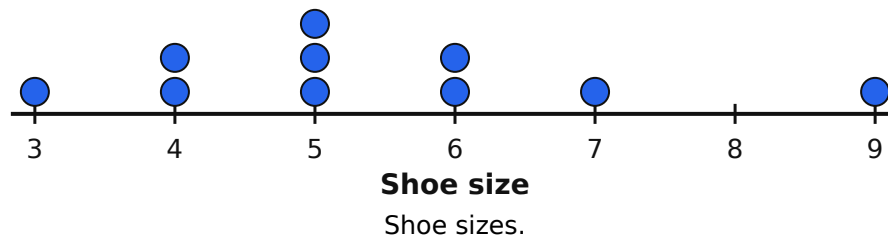
Exercise 17 - Make a histogram

Make a histogram with intervals 0-9, 10-19, and 20-29 for these numbers of text messages: 3, 5, 6, 8, 9, 11, 12, 14, 15, 17, 18, 19, 21, 24, 26.

Exercise 18 - More spread out

Class A has quiz scores from 6 to 10. Class B has quiz scores from 2 to 10. Which class has the greater spread of scores? Explain using the range.

Exercise 19 - Estimate the center



Give a number near the center of the shoe size data and tell how you chose it.

Exercise 20 - Percent at least 30

Use the reading minutes data (5, 8, 12, 15, 15, 18, 20, 22, 25, 25, 28, 30, 32, 35, 38, 40, 45, 45, 50, 55). What percent of the 20 students read at least 30 minutes?

Exercise 21 - Choose the better display

A teacher has 60 test scores from 0 to 100. Should she use a dot plot or a histogram to show them? Explain.