

AP Statistics - Graphs of Quantitative Data and Shape - Test

Common Core AP STAT 1.4, AP STAT 1.5, HSS-ID.A.1, HSS-ID.A.3 · maths-pdf.fr/en/

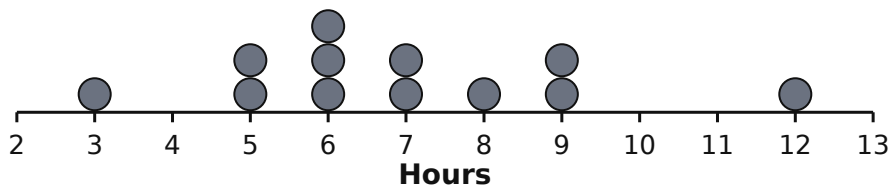
Name: _____ Class: _____ Date: ____/____/____

This 45-minute test covers dotplots, stemplots, histograms, shape, and descriptions of quantitative distributions. Show your counting and write every description in the context of the data.

About this test

- Grade: AP Statistics
- Chapter: Graphs of Quantitative Data and Shape
- Standards: AP STAT 1.4, AP STAT 1.5, HSS-ID.A.1, HSS-ID.A.3
- Time: 45 minutes
- Total: 20 points

Question 1 - Read the dotplot [3 pts]



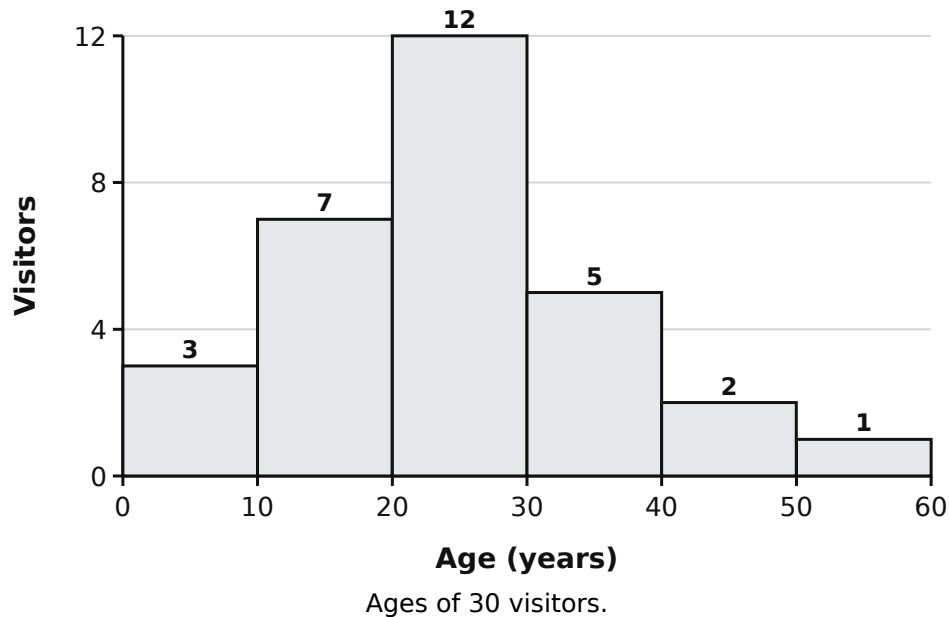
Study hours of 12 students in a week.

(a) How many students studied exactly 6 hours? (1 point) (b) What percent studied 9 hours or more? (1 point) (c) Is 12 hours a possible outlier? Explain. (1 point)

Question 2 - Stemplot [3 pts]

Make a stemplot with a key for these 11 scores: 51, 56, 58, 62, 63, 65, 65, 71, 74, 78, 81. Then state the median. (2 points for the plot, 1 point for the median)

Question 3 - Histogram counts [3 pts]



(a) How many visitors are under 30? (1 point) (b) What percent are 40 or older? (1 point) (c) Describe the shape. (1 point)

Question 4 - Bar graph or histogram [2 pts]

Explain two differences between a bar graph and a histogram.

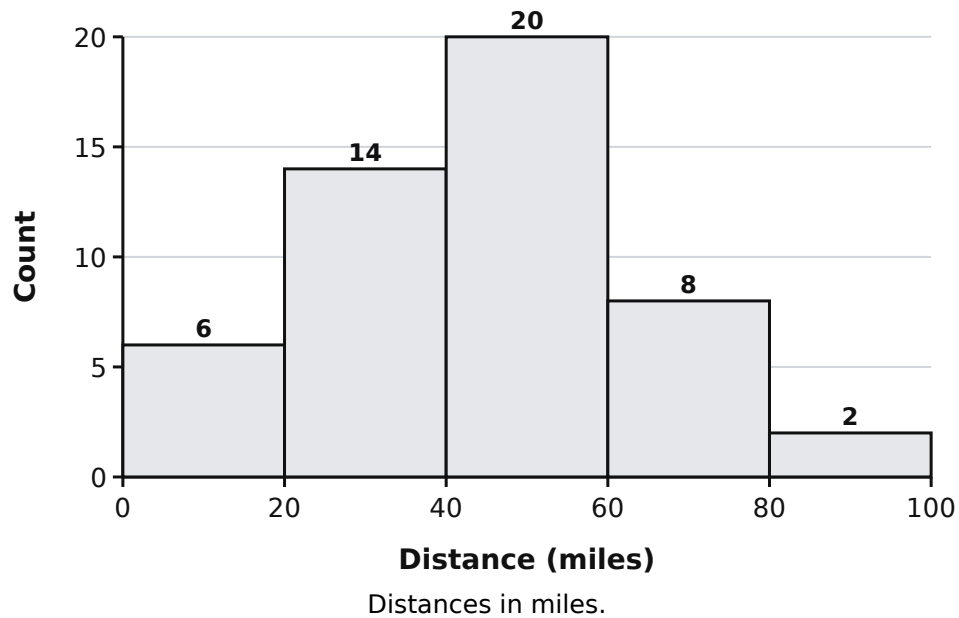
Question 5 - Shape vocabulary [2 pts]

A data set of incomes has most values between \$30,000 and \$60,000 but a few above \$200,000. Describe the shape and say which direction the tail points.

Question 6 - Bimodal data [2 pts]

A histogram of the wait times at a clinic has peaks near 10 minutes and 45 minutes. Describe the shape and give a possible explanation in context.

Question 7 - Relative frequency [2 pts]



Find the relative frequency of the 40 to under 60 interval and the percent of values below 40.

Question 8 - Describe a distribution [3 pts]

Daily high temperatures (°F) for 9 days: 61, 63, 64, 64, 65, 66, 67, 68, 90. Describe the distribution using shape, outliers, center, and spread in context.