

AP Statistics - Five-Number Summary, Boxplots and Comparing Distributions - Test

Common Core AP STAT 1.8, AP STAT 1.9, HSS-ID.A.1, HSS-ID.A.2 · maths-pdf.fr/en/

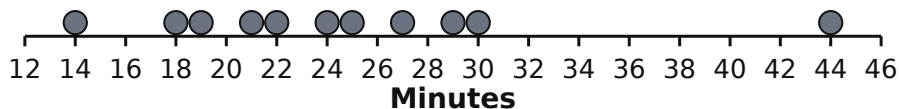
Name: _____ Class: _____ Date: ____/____/____

This 45-minute test covers the five-number summary, boxplots with outliers, and comparing distributions. Show every quartile calculation and write comparisons in complete sentences using context.

About this test

- Grade: AP Statistics
- Chapter: Five-Number Summary, Boxplots and Comparing Distributions
- Standards: AP STAT 1.8, AP STAT 1.9, HSS-ID.A.1, HSS-ID.A.2
- Time: 45 minutes
- Total: 20 points

Question 1 - Five-number summary [3 pts]



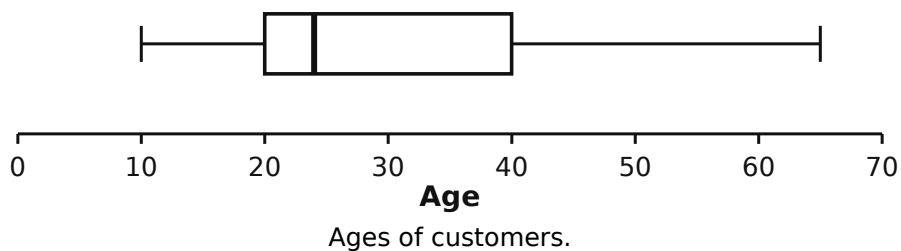
Eleven delivery times.

Find the five-number summary, the IQR, and the upper fence for the data in the dotplot. (3 points)

Question 2 - Outlier decision [2 pts]

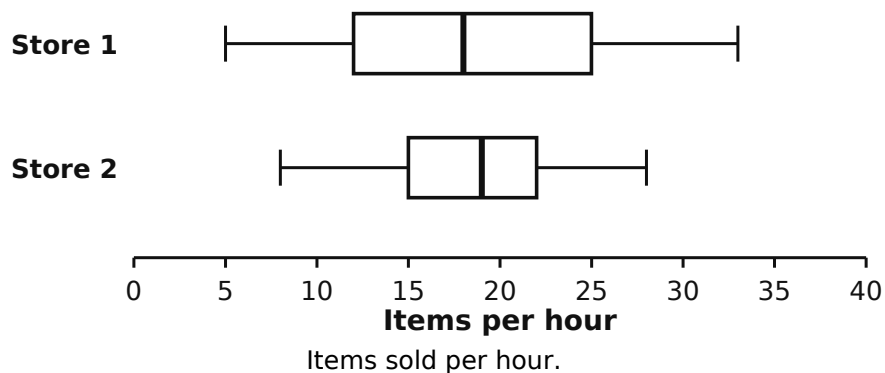
Using the data in the dotplot, decide whether 44 is an outlier. Explain.

Question 3 - Read a boxplot [3 pts]



(a) Find the range and the IQR. (1 point) (b) Describe the shape and explain. (1 point) (c) About what percent of customers are older than 40? (1 point)

Question 4 - Compare two stores [4 pts]



Compare the two distributions of items sold per hour in context. Discuss center and spread. (4 points)

Question 5 - Percent in a section [2 pts]

A boxplot summarizes 200 salaries. About how many salaries are between Q1 and Q3? About how many are above the median?

Question 6 - Find a quartile [2 pts]

The IQR is 14 and Q1 is 30. Find Q3 and the upper fence.

Question 7 - Draw a boxplot [2 pts]

Draw a boxplot for the five-number summary 5, 12, 20, 26, 38 and state the IQR.

Question 8 - Limits of a boxplot [2 pts]

Name one feature of a distribution that a boxplot can hide, and name a graph that would show it.