LESSON MAKER PRO

Data Plot Decisions

Choose, read, and compare data displays.

HIGH SCHOOL · GDA.DSP.C.9

GDA.DSP.C.9 "Represent the distribution of univariate quantitative data with plots on the real number line, choosing a format (dot plot, histogram, or box plot) most appropriate to the data set..."

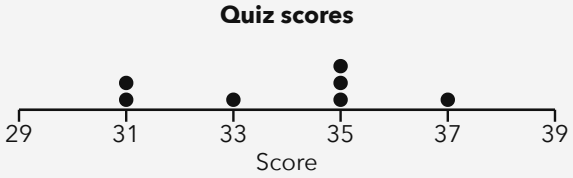
NAME _____ DATE _____

CHOOSE A PLOT

Use a dot plot to show individual values and a histogram to group values into intervals. A box plot summarizes a distribution with five key values; a scatter plot shows pairs of measurements.

WORKED EXAMPLE

Which value has the tallest stack? How many dots are in it?



1. Count the dots above each value.
2. The tallest stack is above 35 and has 3 dots.

Answer: 35; 3 dots

PRACTICE 4 problems

1 For 4, 4, 5, 6, 6, 6, 7, 7, choose a plot that shows each value. What is its highest stack?

ANSWER _____

2 Group 22, 24, 27, 30, 33, 36, 40, 44 into histogram bins 20-29, 30-39, and 40-49. Give the three bin counts in order.

ANSWER _____

3 Find Q1 and Q3 for a box plot of 1, 2, 3, 4, 5, 8, 9, 10, 12.

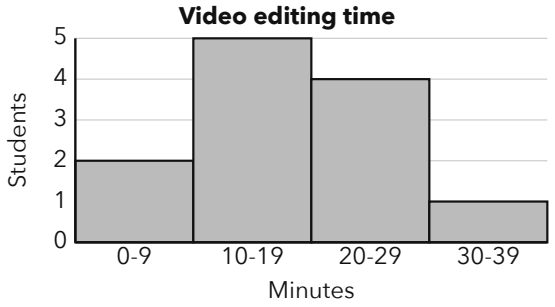
ANSWER _____

4 Minutes: 10, 20, 30, 40. Songs: 2, 4, 5, 8 in the same order. Which plot shows their relationship? Give the point for 40 minutes.

ANSWER _____

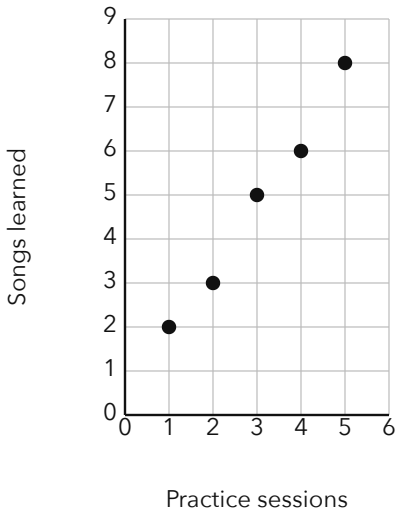
APPLY IT Show your work

1 Students tracked minutes spent editing a video. How many spent at least 20 minutes? What fraction of the students is that?



ANSWER _____

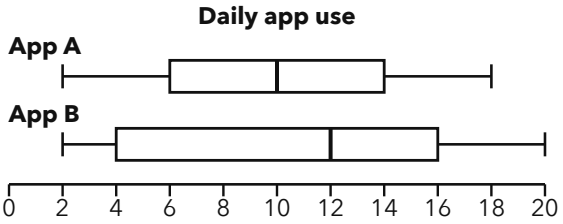
2 Each point shows a musician's practice sessions and songs learned. At how many sessions were 6 songs learned? Describe the trend.



ANSWER _____

CHALLENGE One step up

Two apps track daily minutes. Which app has the greater IQR, and by how many minutes? Which has the higher median?



WORK SPACE AND ANSWER

ANSWER KEY

Data Plot Decisions

HIGH SCHOOL · GDA.DSP.C.9

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	For 4, 4, 5, 6, 6, 6, 7, 7, choose a plot that shows each value. What is its highest stack?	**Dot plot; 3 dots at 6.**
2	Group 22, 24, 27, 30, 33, 36, 40, 44 into histogram bins 20-29, 30-39, and 40-49. Give the three bin counts in order.	**3, 3, 2**
3	Find Q1 and Q3 for a box plot of 1, 2, 3, 4, 5, 8, 9, 10, 12.	**Q1 = 2.5; Q3 = 9.5**
4	Minutes: 10, 20, 30, 40. Songs: 2, 4, 5, 8 in the same order. Which plot shows their relationship? Give the point for 40 minutes.	**Scatter plot; (40, 8)**

PART 2 · APPLY IT

1. **5 students; 5/12** Add the last two bins to get 5 students. All four bins total 12 students.
2. **4 sessions; songs learned generally increases as sessions increase.** Read the x-coordinate of the point at 6 songs. The points rise from left to right.

CHALLENGE

App B has the greater IQR by 4 minutes. App B also has the higher median.

For the trend, accept a clear description of a positive association. App A's IQR is 8 minutes, and App B's is 12 minutes.