

Box and Whisker Plots
Algebra 1-2

Name _____
Period _____

Put the list of numbers in order, identify Q1(Lower Quartile), Q2(Median), and Q3(Upper Quartile) and then draw a box-and-whisker plot for each set of data.

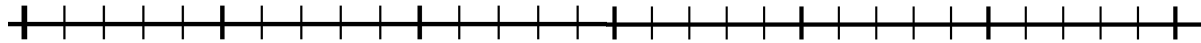
1. {6, 9, 22, 17, 14, 11, 18, 28, 19, 21, 16, 15, 12, 3}

List in order _____

Q1

Q2

Q3



2. {\$45, \$37, \$50, \$53, \$61, \$95, \$46, \$40, \$48, \$62}

List in order _____

Q1

Q2

Q3



3. {14, 9, 1, 16, 20, 17, 18, 11, 15}

List in order _____

Q1

Q2

Q3



4. {\$20, \$35, \$42, \$26, \$53, \$18, \$36, \$27, \$21, \$32}

List in order _____

Q1

Q2

Q3



5.

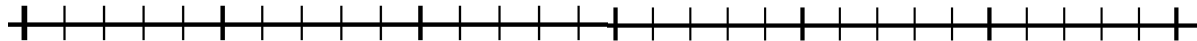
Goals scored by MLS leading scorers 2000		
26	15	12
16	15	1
13	11	10
16	15	5
16	13	9

List in order _____

Q1

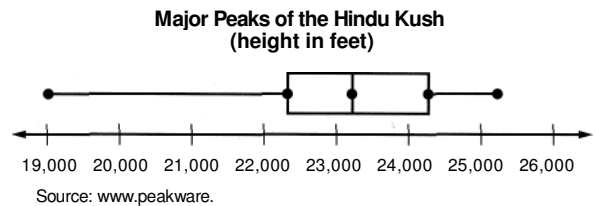
Q2

Q3



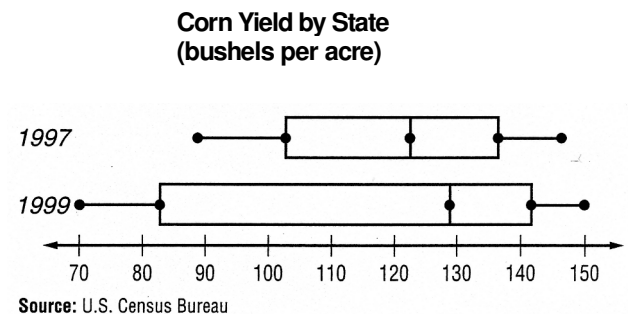
For Exercises 6-8, use the box-and-whisker plot shown.

- How tall is the highest peak of the Hindu Kush?
- What is the median height of the major peaks?
- Write a sentence describing what the box-and-whisker plot tells about the major peaks of the Hindu Kush.



For Exercises 8-10, use the box-and-whisker plot shown.

- In which year was the corn yield more varied? Explain.
- How does the median yield in 1999 compare with the median yield in 1997?
- Write a couple of sentences that compare the 1997 yields with the 1999 yields.



12. Each box and whisker plot at the bottom of the page shows the prices of used cars (**in thousands of dollars**) advertised for sale at three different car dealerships.

a. Which dealer offers the least expensive car and at what price? _____

b. Which dealer has the lowest median price and how much is it? _____

c. Which dealer has the smallest price range and what is it? _____

d. Which dealer's prices have the smallest Interquartile Range (**Q3-Q1**), and what is it? _____

e. Which dealer generally sells less expensive cars? _____

Support your answer with information from the box and whisker plots.

Cars are Us Auto Sales



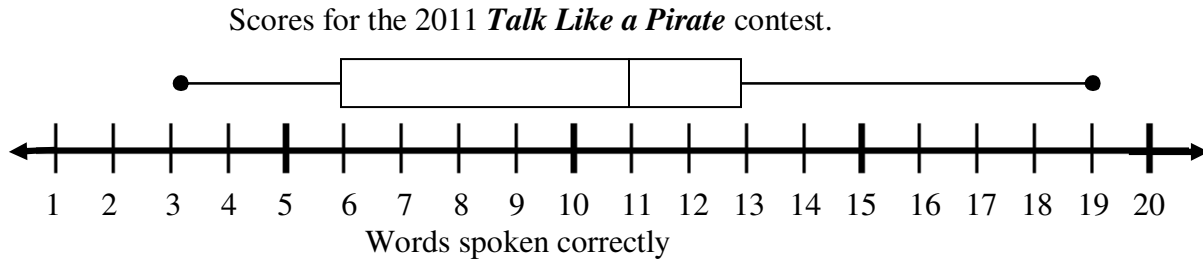
Better-than-New Auto Sales



Yours Now Auto Sales



13. Several students entered a *Talk Like a Pirate* contest. They sent in a tape of themselves talking like a pirate and 3 weeks later got their scores back. To help them understand just how well they did compared to other contestants, the *Talk Like a Pirate Association* included a box and whisker graph showing the scores for all 10,000 contestants. Use the graph to answer the questions below. **Explain all your answers!**



- A. Legolas had a score of 13. He claims that means he speaks better pirate talk than $\frac{3}{4}$ all the people who entered the contest. Does the data support his claim?
- B. David Jones had a score of 4. How does he compare to other pirate talkers?
- C. Jack claims he got all 20 words correct, but he refuses to let anyone look at his score report. Should you believe him?
- D. There were 10,000 people who took the test. How many people scored better than a 6?
- E. 5,000 people scored better on the test than Kiera and 5,000 scored worse. What was Kiera's score?