

- 9 In an experiment to compare 2 fertilizers, 12 trees were treated with Fertilizer A, and a different 12 trees were treated with Fertilizer B. The table below gives the number of kilograms of oranges produced per tree.

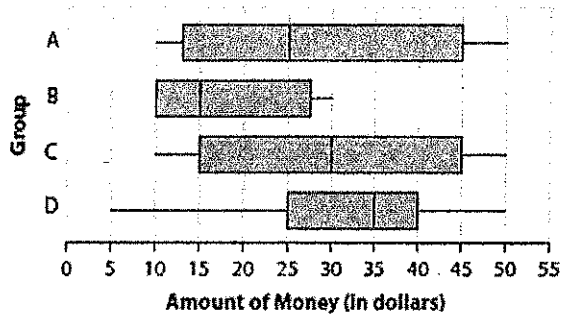
**Kilograms of Oranges  
per Tree**

| Fertilizer A | Fertilizer B |
|--------------|--------------|
| 3            | 14           |
| 14           | 116          |
| 19           | 33           |
| 0            | 40           |
| 96           | 10           |
| 92           | 72           |
| 11           | 8            |
| 24           | 10           |
| 5            | 2            |
| 31           | 13           |
| 84           | 15           |
| 15           | 44           |

- a. Create 5-number summaries (minimum, maximum, median, Q1, Q3) for the data above. Create one for Fertilizer A and one for Fertilizer B.
- b. Create a box plot for each set of data above using the 5-number summaries you found.
- c. In one paragraph, compare and contrast the data for kilograms of oranges produced using Fertilizer A and Fertilizer B. Refer to your 5-number summaries and box plots.

12. The box plots below represent the amounts of money (in dollars) carried by the people surveyed in four different places at a mall.

**Amounts of Money Carried  
By Mall Shoppers**



- Which group of people has the smallest range? The largest?
- Which group of people has the smallest interquartile range? The largest?
- Which group of people has the largest median amount of money?
- Which distribution is most symmetric?
- Which group of people do you think might be high school students standing in line for tickets at a movie theater on Saturday night? Explain your reasoning.

- 6 The table below shows the total points scored during the first eight years of the NBA careers of Kareem Abdul-Jabbar and Michael Jordan.

Two Shooting Stars

| Kareem Abdul-Jabbar |               | Michael Jordan |               |
|---------------------|---------------|----------------|---------------|
| Year                | Points Scored | Year           | Points Scored |
| 1970                | 2,361         | 1985           | 2,313         |
| 1971                | 2,596         | 1986           | 408           |
| 1972                | 2,822         | 1987           | 3,041         |
| 1973                | 2,292         | 1988           | 2,868         |
| 1974                | 2,191         | 1989           | 2,633         |
| 1975                | 1,949         | 1990           | 2,753         |
| 1976                | 2,275         | 1991           | 2,580         |
| 1977                | 2,152         | 1992           | 2,404         |

- a. Which player had the higher mean number of points per year?

- 8 The numbers below are the play times (using the battery) in hours of 19 models of MP3 players. (Source: *Consumer Reports*, December 2005)

63, 45, 32, 30, 26, 18, 17, 17, 16,  
16, 14, 14, 13, 10, 10, 10, 10, 9, 7

- a. Compute the median and interquartile range and the mean and standard deviation of the play times.

