1. Many professional schools require applicants to take a standardized test. Suppose 1000 students take the test, and you find that your score is 63 (out of 100 points) was the 73rd percentile. This means:

   a) At least 73% of the people got 63 or better.
   b) At least 270 people got 73 or better.
   c) Atleast270peoplegot63orbetter.
   d) At least 27% of the people got 73 or worse.
   e) At least 730 people got 73 or better.

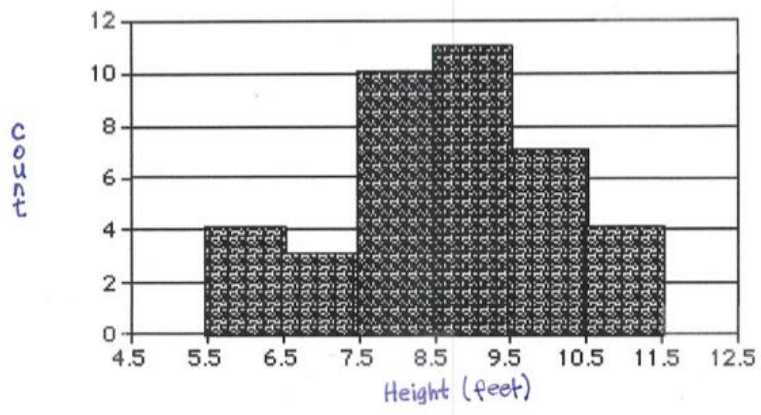
2. According to the Mead Johnson Nutritional Division, a 10-year old girl weighing 84 pounds would be in the 78% percentile. Suppose there are 1000 10-year old girls in San Francisco, then which of the following statement is true.

   a) At least 78% of the 10-year old girls weigh 84 pounds or more.
   b) At least 22% of the 10-year old girls weigh 84 pounds or less.
   c) At least 220 10-year old girls weigh 78 pounds or more.
   d) At least 780 10-year old girls weigh 84 pounds or more.
   e) At least 780 10-year old girls weigh 84 pounds or less.

3. A 6th grader at Hoover Middle School discovers that her grade on a recent California Achievement Test was at the 64th percentile. If there were 25,000 middle school students in CA took the test, then approximately how many students received a higher grade than she did?

4. A student discovers that her grade on a recent test was the 72nd percentile. If 90 students took the test, then approximately how many students received a higher grade than she did?

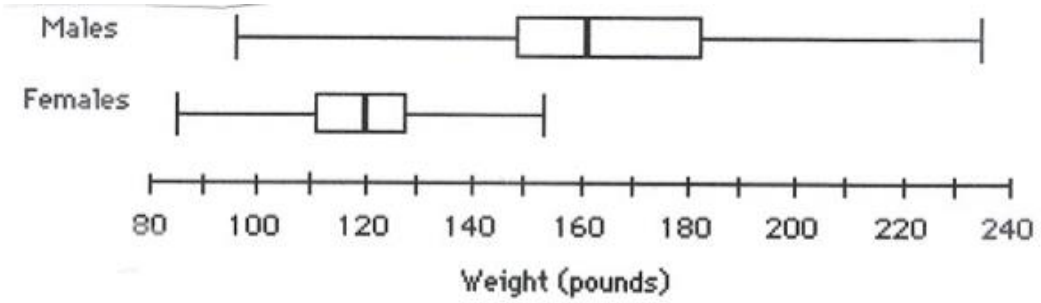
3. A histogram of the heights of 39 plants is given below.




   The 75th percentile of the height distribution is approximately:

   a) 9.4 feet  b) 9.7 feet  c) 7.7 feet
   d) 7.5 feet  e) 10.0 feet

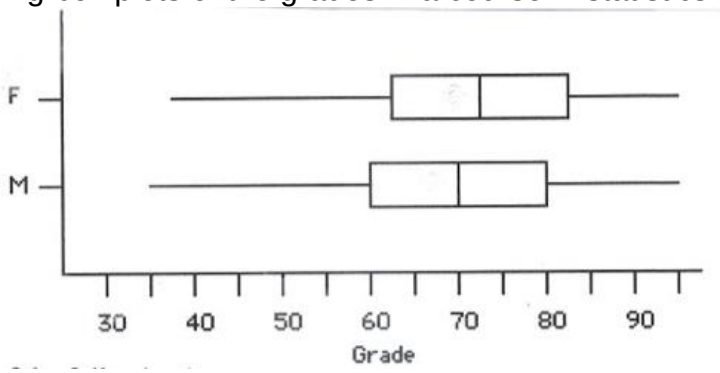
4. The weights of the male and female students in a class are summarized in the following boxplots.




Which of the following is NOT correct?

a) About 50% ofthe male students have weights between 150 and 185 lbs.
b) About 25% of female students have weights more than 130 lbs.
c) The median weight of the male students is about 162 lbs.
d) The mean weight of female students is about 120because of symmetry.
e) The male students have less variability than the female students.

5. Consider the following box plots of the grades in a course in statistics for each gender.




Which of the following is correct?

a) The mean grade of the female students is about 72.
b) The median grade for the male students is about 68.
c) About 25% of the female students get grades above 72.
d) About 10% of male students get grades below 60.
e) About 50% of female students get grades between 62 and 82.

6. Using the box plots from problem #5, can you conclude that female students get better grades than male students? Explain your answer briefly.