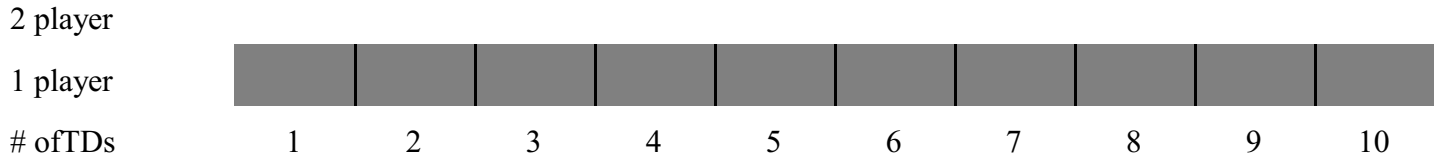## Percentiles and Histograms

1) What is a percentile?   2) What is a histogram?

The histogram below shows the number of touchdowns scored by several football players.

2 player

1 player

ofTDs   1   2   3   4   5   6   7   8   9   10

1) What percentage of players scored 3 TDs or less?   2) Scoring how many TDs lies at the 30th percentile?
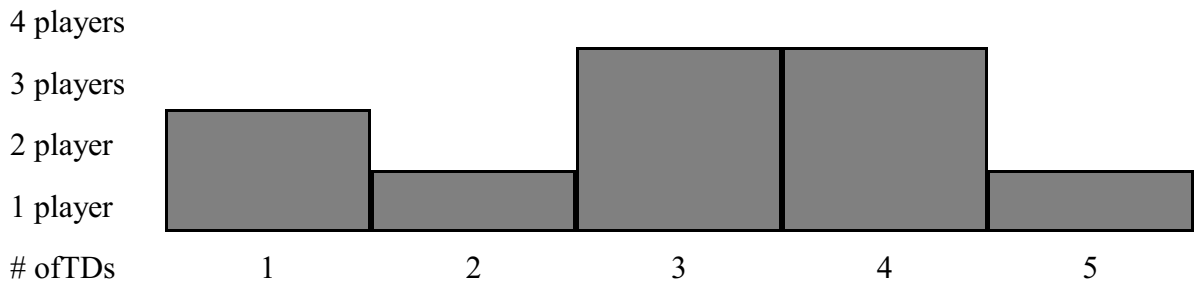
3) What percentage of players scored 5 TDs or less?   4) Scoring how many TDs lies at the 90th percentile?

5) A player scoring 2 TDs lies at which percentile?   6) A player scoring 8 TDs lies at which percentile?

The histogram below shows the number of touchdowns scored by several football players.

4 players

3 players

2 player

1 player

ofTDs   1   2   3   4   5

7) What percentage of players scored 3 TDs or less?   8) Scoring how many TDs lies at the 30th percentile?

9) What percentage of players scored 1 TD or less?   10) Scoring how many TDs lies at the 80th percentile?

11) A player scoring 2 TDs lies at which percentile?   12) A player scoring 4 TDs lies at which percentile?
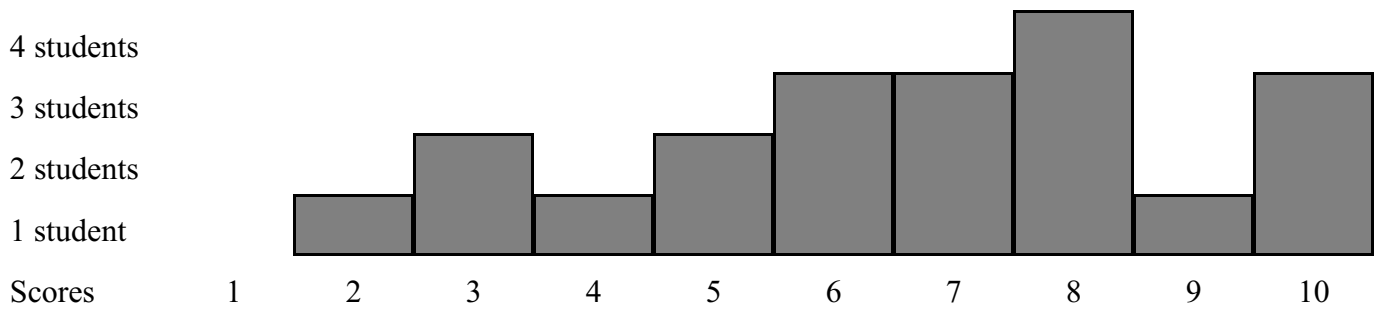
13) What is the median of this data set?   14) What is the range of this data set?

15) What are Q1 and Q3 for this data set?   16) What is the IQR for this data set?

The histogram below shows quiz scores for a math class.

4 students

3 students

2 students

1 student

Scores   1   2   3   4   5   6   7   8   9   10

17) What percentage of students scored 3 or lower?

18) Which score lies at the 55th percentile?

19) What percentage of students scored 7 or lower?

20) Which score lies at the 20th percentile?

21) A student scoring a 5 lies at which percentile?

22) A student scoring a 9 lies at which percentile?

23) What is the median of this data set?

24) What is the range of this data set?
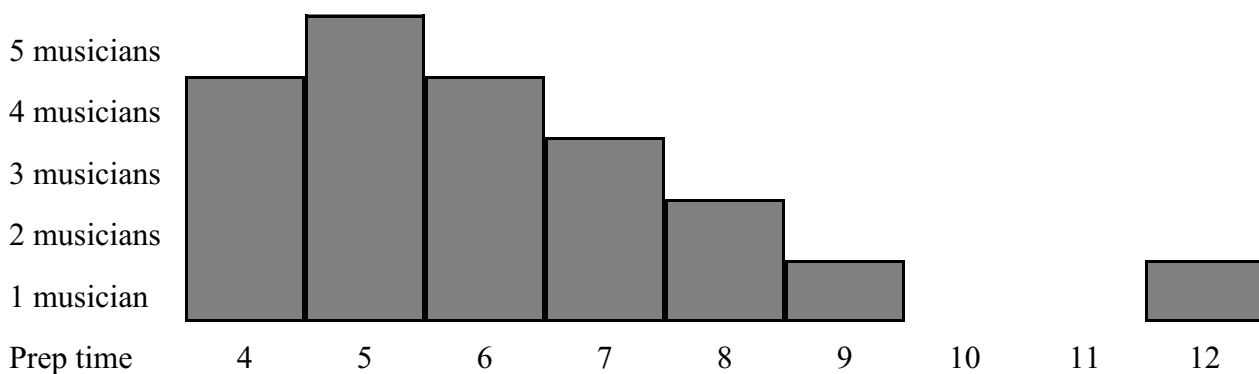
25) What are Q1 and Q3 for this data set?

26) What is the IQR for this data set?

27) What is the mode of this data set?

The histogram below shows the number of hours/day a group of musicians spent in preparation for an upcoming competition.

5 musicians

4 musicians

3 musicians

2 musicians

1 musician

Prep time   4   5   6   7   8   9   10   11   12

28) What percentage of musicians practiced for 5 hours or fewer?

29) How many hours would you have to practice to fall into the 50th precentile?

30) A competitor who practiced for 7 hours would fall into which percentile?

31) What percentage of musicians practiced for 8 hours or fewer?

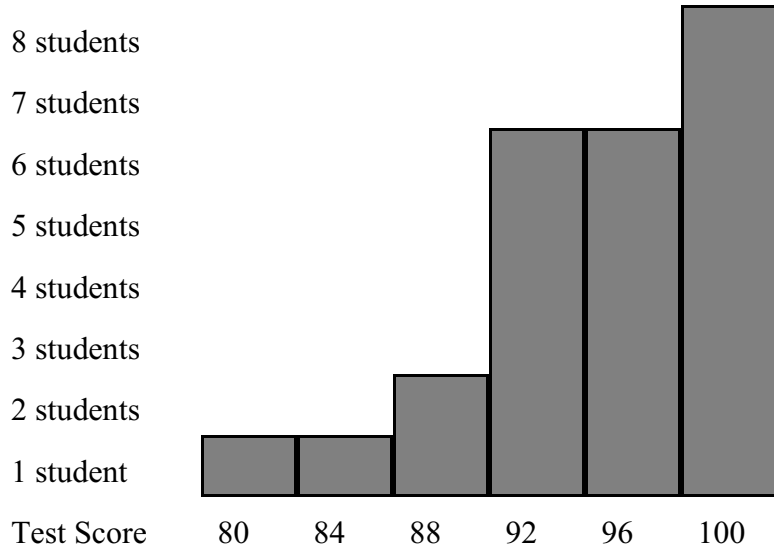32) How many hours would you have to practice to fall into the 75th precentile?

33) A competitor who practiced for 4 hours would fall into which percentile?

34) How many hours would you have to practice to fall into the 60th precentile?

35) How many hours would you have to practice to fall into the 95th precentile?

36) What is the median of this data set?   37) What is the range of this data set?

38) What are Q1 and Q3 for this data set?   39) What is the IQR for this data set?

40) What is the mode of this data set?

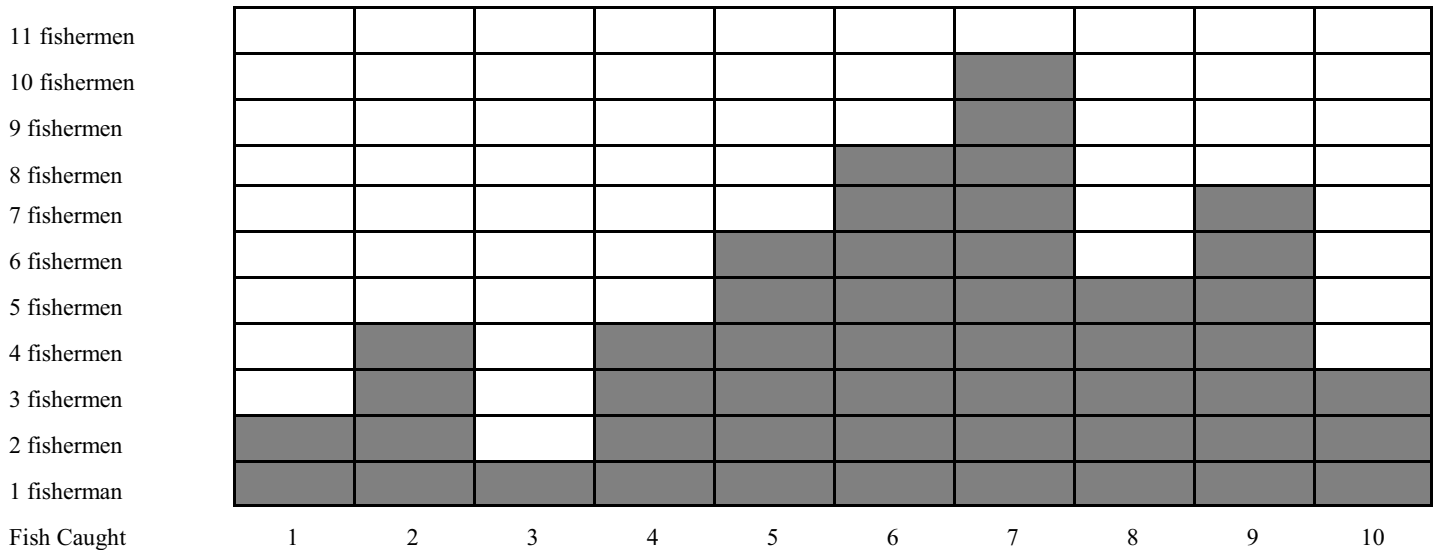The histogram below shows the number of correct matches a group of subjects got on a memory test.
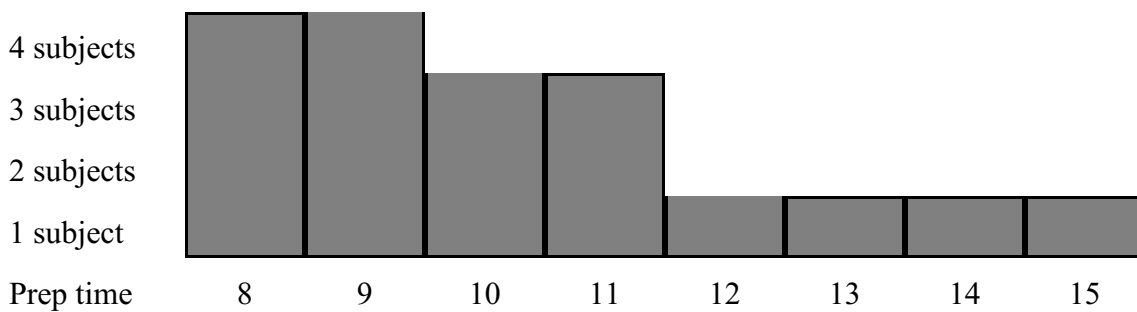
41) What percentage of subjects got 12 matches or fewer?

42) How many matches would you have to get to fall into the 20th precentile?

43) A subject who got 10 matches would fall into which percentile?

44) How many matches would you have to get to fall into the 45th precentile?

45) How many matches would you have to get to fall into the 80th precentile?

46) What is the median of this data set?   47) What is the range of this data set?

48) What are Q1 and Q3 for this data set?   49) What is the IQR for this data set?

50) What is the mode of this data set?

The histogram below shows the test results for students in a math class.

8 students

7 students

6 students

5 students

4 students

3 students

2 students

1 student

Test Score   80   84   88   92   96   100

51) What score would you have to earn to fall in the 60th percentile?

52) A scored a 92 would fall into which percentile?

53) What score would you have to earn to fall in the 15th percentile?

54) What score would you have to earn to fall in the 90th percentile?

55) How many matches would you have to get to fall into the 80th precentile?

56) What is the median of this data set?   57) What is the range of this data set?

58) What are Q1 and Q3 for this data set?   59) What is the IQR for this data set?

60) What is the mode of this data set?

The histogram below shows the number of fish caught by fishermen in a fishing competition.

11 fishermen

10 fishermen

9 fishermen

8 fishermen

7 fishermen

6 fishermen

5 fishermen

4 fishermen

3 fishermen

2 fishermen

1 fisherman

Fish Caught   1   2   3   4   5   6   7   8   9   10

61) How many fish would you have to catch to fall into the 15th precentile?

62) How many fish would you have to catch to fall into the 80th precentile?

63) A competitor who caught 6 fish would lie in which percentile?

64) What percentage of fishermen caught 5 fish or fewer?

65) How many fish would you have to catch to fall into the 95th precentile?

66) How many fish would you have to catch to fall into the 30th precentile?

67) What is the median of this data set?   68) What is the range of this data set?

69) What are Q1 and Q3 for this data set?   70) What is the IQR for this data set?

71) What is the mode of this data set?