

Examples: Finding Percentiles

1. The math test scores were: 50, 65, 70, 72, 72, 78, 80, 82, 84, 84, 85, 86, 88, 88, 90, 94, 96, 98, 98, 99. Find the percentile rank for a score of 84 on this test.

2. The math test scores were: 50, 65, 70, 72, 72, 78, 80, 82, 84, 84, 85, 86, 88, 88, 90, 94, 96, 98, 98, 99. Find the percentile rank for a score of 86 on this test.

3. **Question:** The scores for student are 40, 41, 42, 43, 45, 47, 49, 50, 51, 51, 54, 57, 59, 60, 61, 63, 67, 69, 70, 71. Find out the percentile for score 51.

4. The scores for student are 21, 24, 26, 27, 28, 28, 31, 32, 34, 36, 39, 40, 42, 44, 45, 46, 49, 53, 57, 60. Find out the percentile for score 28.

5) The following data give the number of keyboards assembled at the Twentieth Century Electronics Company for a sample of 25 days.

45	52	48	41	56	46	44	42	48	53	51
53	51	48	46	43	52	50	54	47	44	47
50	49	52								

- Calculate the values of the three quartiles and the interquartile range.
- Find the percentile rank of 50.

6) The following data give the number of runners left on bases by each of the 30 Major League Baseball teams in the games played on August 12, 2004.

6	6	6	7	6	10	6	3	6	8	10
7	18	11	6	9	4	8	9	5	5	4
8	8	8	5	5	5	13	8			

- Calculate the values of the three quartiles and the interquartile range.
- Find the percentile rank of 10.

7) The following data give the number of students suspended in the Tri-City School District for each of the past 12 weeks.

15 9 12 11 7 6 9 10 14 3 6 5

- a) Calculate the values of the three quartiles and the interquartile range.
- b) Find the percentile rank of 7.

8) Nixon Corporation manufactures computer monitors. The following data give the numbers of computer monitors produced at the company for a sample of 30 day.

24 32 27 23 33 33 29 25 23 36 26
26 31 20 27 33 27 23 28 29 31 35
34 22 37 28 23 35 31 43

- a) Calculate the values of the three quartiles and the interquartile range.
- b) Find the percentile rank of 32.