



Practice – Part 2

Instructions: Answer each of the following practice questions on a separate piece of paper. Step by step solutions are provided under the Solutions tab. You will learn the material more thoroughly if you complete the questions before checking the answers under the Solutions tab in Moodle.

1. A class of 20 students had the following scores on their most recent test:
75, 77, 68, 78, 80, 81, 71, 83, 83, 84, 64, 84, 85, 87, 67, 88, 48, 88, 89, 90
 - a. Anik's mark on the test is 80%. What is his percentile rank?
 - b. Janice's mark on the test is 90%. What is her percentile rank?
 - c. Janice had the highest mark in the class. Why is her percentile rank not equal to 100%?
 - d. Nicole's mark on the test is 48%. What is her percentile rank?
 - e. Find the median of the data. What percentile does this represent?
2. A group of 10 golfers played a round of golf on a nine-hole golf course. Their scores were 36, 45, 38, 39, 40, 37, 48, 42, 51, 41.
 - a. George's score was 38. What is George's percentile rank?
 - b. Jaleesa's score is 45. What is Jaleesa's percentile rank?
3. Stefan wants to apply for a scholarship so he can attend a college. Of the 43 students that applied, 39 have lower averages than Stefan's. What is Stefan's percentile rank compared to the 43 students who applied to the college?

Determine whether the following statements are true or false.

- _____ 4. The higher the percentile rank of a chosen value, the greater the percent of scores above that chosen value.
- _____ 5. A mark of 75% always has a percentile rank of 75%.
- _____ 6. A mark of 75% might have a percentile rank of 75.
- _____ 7. It is possible to have a mark of 95% and a percentile rank of 40.
- _____ 8. The higher the percentile rank, the better than score compared to other scores.
- _____ 9. The 80th percentile indicates that 80% of the values are above the chosen value.
- _____ 10. The median is the 75th percentile.
- _____ 11. Two equal values will have the same percentile rank.