

Module 5D Questions:

1. What are the best values to describe a normal distribution?

- a) Median and variance because they are not influenced by outliers
- b) Mean and standard deviation when the data is not skewed by outliers
- c) Only mean, because the standard deviations are all the same with normal distributions
- d) Only mode, because that is where the densest part of the curve lies

2. Which is the following is NOT a property of the normal distribution?

- A. The probability density is highest exactly at the mean
- B. The mean, mode and median are all equal
- C. The normal curve is symmetrical about the mean μ
- D. The probability that a random data point is within two standard deviation of the mean is approximately 68%

2. Sara and Jerry took a math exam. Sara's percentile score on the exam was 85; Jerry's percentile score on the same test was 70. We know that

- a. Sara scored better than 85 of her classmates.
- b. Sara correctly answered 15 more questions Jerry did.
- c. They both scored better than average on the math exam.
- d. Sarah correctly answered more items than Jerry did.