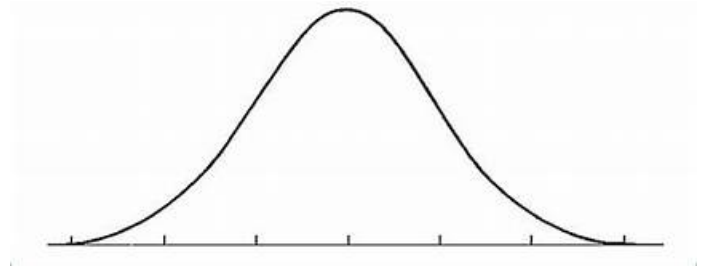




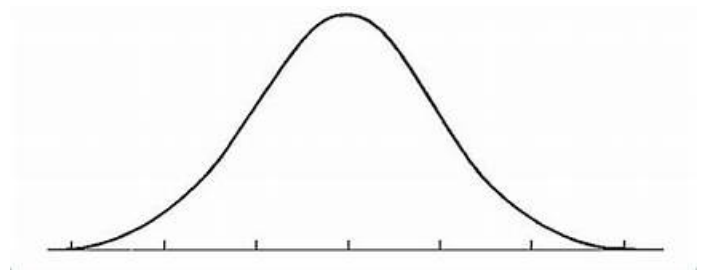
7) ACT mathematics scores for a particular year are normally distributed with a mean of 27 and a standard deviation of 2 points. Make a bell curve to answer the following questions.

- a) What is the probability that a randomly selected score is greater than 29 points?
- b) What percentage of students scores are between 31 and 23?
- c) A student who scores a 31 is in the which percentile?



8) Mr. Barnett's test is normally distributed with a mean of 65 and standard deviation of 5 points. Use the bell curve to answer the following questions.

- a) What is the probability that a randomly selected score is greater than 75 points?
- b) What percentage of students scores are between 60 and 70?
- c) A student who scores an 80 is in which percentile?



9) The number of a beats per minute that a hummingbird's wings flap is normally distributed with a mean of 145 and a standard deviation of 2.

- a) What is the probability that a randomly selected hummingbird's flaps its wings greater that 151 times minute?
- b) What percentage of hummingbirds flap their wings between 141 and 149?
- c) A hummingbird that flaps its wings 147 times a minute is in the which percentile?

