

**In-Video Quiz Questions for
Unit 2: Part 2 – (2) Evaluating the normal distribution**

(02:58)

1. What is the probability that a student's subjective social class identity is upper middle class?
 - (a) The distribution is nearly normal
 - (b) The distribution is more variable than a normal distribution with mean 7 and standard deviation 1
 - (c) The distribution is less variable than a normal distribution with mean 7 and standard deviation 1

Answers:

1. b

Explanation: In a normal distribution with mean 7 and standard deviation 1, we would expect 68% of the data to be between 6-8, 95% of the data between 5-9, and 99.7% of the data between 4-10 hours. In this dataset a lower percentage than expected fall within these ranges, and hence the data are more spread out, i.e. more variable, than $N(\text{mean} = 7, SD = 1)$.