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## The Normal Distribution: Finding the Area Under the Curve - Quiz

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### Question 1

1/1 point (graded)

After receiving your graded midterm for 14.310x you are told that the exam had an approximately normal distribution. You are told by your TA that you scored a standard deviation above average. You scored higher than what percent of students?

☐ a. 68 %

☒ b. 84 % ✓

☐ c. 95 %

☐ d. 50 %


### Explanation

Approximately 68% of the data in a normal is within one standard deviation from the normal distribution. If you are exactly one standard deviation above the mean, then you scored higher than 84% of students. If 68% of students scored within one standard deviation of the mean, then 32% scored


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### **Human Subjects and Special Distributions**

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either lower than one standard deviation below, or greater than one standard deviation above the mean. So, there are  $32/2=16\%$  of students that scored one deviation below the mean, added to the 68% that scored within 1 standard deviation of the mean, meaning that you scored higher than  $68+16\%=84\%$  of students.

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You have used 1 of 2 attempts

✓ Correct (1/1 point)

### **Discussion**

**Topic:** Module 6 / The Normal Distribution: Finding the Area Under the Curve - Quiz

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