A confidence interval estimate is determined from the summer earnings of an SRS of n students. All other things being equal, which of the following will result in a larger margin of error?

I. A greater confidence level
II. A larger sample standard deviation
III. A larger sample size

(A) I and II   (B) I and III   (C) II and III   (D) I, II, and III

(E) None of the above gives the complete set of true responses.

Answer: (A) The margin of error varies directly with the critical z-value and directly with the standard deviation of the sample, but inversely with the square root of the sample size.