

### INFERENCE 36

Two 95 percent confidence interval estimates are obtained: I (78.5, 84.5) and II (80.3, 88.2).

a. If the sample sizes are the same, which has the larger standard deviation?

b. If the sample standard deviations are the same, which has the larger size?

(A) a. I    b. I

(B) a. I    b. II

(C) a. II    b. I

(D) a. II    b. II

(E) More information is needed to answer these questions.

**Answer:** (C) Narrower intervals result from smaller standard deviations and from larger sample sizes.