Lesson 12.5, page 735, Exercise 32, Teachers

(Based on 1994 survey data haven’t changed.)

Lesson 12.7, page 751, Exercises 48 and 49, SAT Scores

In 2000, scores on the mathematics section of the SAT (Scholastic Aptitude Test) were normally distributed with a mean of 514 and a standard deviation of 113. Scores on the English section of the SAT were normally distributed with a mean of 505 and a standard deviation of 111.

47. What is the probability that a randomly chosen student who took the SAT in 2000 scored at least 740 on the mathematics section and at least 727 on the English section? Assume the scores are independent.

48. What is the probability that five randomly chosen students who took the SAT in 2000 all scored at most 394 on the English section?

49. What is the probability that two randomly chosen students who took that SAT in 2000 both scored between 401 and 627 on the mathematics section?

Answers are unchanged.