41. GULF COAST The map shows the length of shoreline (in miles) along the Gulf of Mexico for each state that borders the body of water. What is the probability that a ship coming ashore at a random point in the Gulf of Mexico lands in the given state?



- a. Texas
- **b.** Florida
- c. Alabama
- 42. TAKS REASONING A magician claims to be able to read minds. To test this claim, five cards numbered 1 through 5 are used. A subject selects two cards from the five cards and concentrates on the numbers.
 - a. What is the probability that the two numbers chosen are 3 and 4?
 - **b.** What is the probability that the magician can correctly identify the two numbers by guessing?
 - **c.** Suppose the magician is able to consistently identify the two numbers about half the time. Does this support the magician's claim to be a mind reader? Explain.
- 43. CHALLENGE In a guessing game, one player secretly places four differentcolored pegs on a board in each of four positions: A, B, C, or D. A second player guesses the configuration of the pegs by placing an identical set of pegs in slots A, B, C, and D on an identical board. The second player is then told how many of the pegs are in the correct slot.
 - a. What is the probability that the second player has all four pegs correct on the first guess?
 - **b.** What is the probability that the second player has exactly one peg correct on the first guess?
 - c. The second player is told she has placed two pegs in the correct slot. The player then switches two of the pegs. What is the probability that the player now has all four pegs in the correct slot?

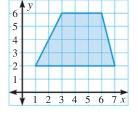
MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

REVIEW

Skills Review Handbook p. 991; TAKS Workbook

- **44.** TAKS PRACTICE What is the area of the figure shown? TAKS Obj. 6
 - (A) 14 square units
 - B 18 square units
 - © 20 square units
 - **D** 36 square units



REVIEW

Lesson 9.1; TAKS Workbook

- 45. TAKS PRACTICE What is the midpoint of the line segment connecting points (-4, -1) and (7, 3)? **TAKS Obj. 7**