Name _____ Class _____ Date _____

9-3 • Guided Problem Solving

GPS Student Page 323, Exercise 23:

a. **Clothes** Ardell has four suit jackets (white, blue, green, and tan) and four dress shirts in the same colors. How many different jacket/shirt outfits does Ardell have?

b. Suppose he grabs a suit jacket and a dress shirt without looking. What is the probability that they will *not* be the same color?

Understand

1. Circle the information you will need to solve.

2. How do you find probability?

_____

_____

Plan and Carry Out

3. How many different suit jackets are there? _____

4. How many different dress shirts are there? _____

5. Using the counting principle, how many different jacket/shirt outfits does Ardell have? _____

6. How many same color jacket/shirt outfits does Ardell have? _____

7. How many different color jacket/shirt outfits does Ardell have? _____

8. What is the probability that they will *not* be the same color? _____

Check

9. How else could you find the total number of jacket/shirt outfits?

_____

Solve Another Problem

10. **a.** Joseph has three pairs of shoes (white, brown, and black) and four pairs of socks (white, brown, black, and blue). How many sock/shoe pairs are there? _____

b. If Joseph selects a pair of shoes and a pair of socks without looking, what is the probability they will be the same color?

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