

Name \_\_\_\_\_

Practice 1 IM 11-12 9/16/2010

Guida has 3 pairs of dress pants: red, blue, and green. She also has 2 vests—red and blue—along with 3 silk shirts: red, green, and white.

a. Make a tree diagram that shows all the possible outfits that include pants, a vest, and a shirt.

b. How many different outfits can Guida create? List them.

c. If we use the Fundamental Counting Principle, how many different outfits are possible?

c. If Guida picks an outfit at random, what is the probability that the outfit will be all red?

Hint: How many total outfits are there? \_\_\_\_\_

How many red outfits are there? \_\_\_\_\_

Write as a fraction  $\frac{\text{Number of red outfits}}{\text{Total number of outfits}}$

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2. At a video rental store, there are 6 comedies, 8 dramas, and 3 science fiction films that **Maureen** wants to see. In how many ways can she choose one of each type of movie to rent?

\_\_\_\_ Comedies \* \_\_\_\_ dramas \* \_\_\_\_ Science fiction = \_\_\_\_\_ ways to choose 3 movies, one of each type.

