

Name: Key

UNIT 11 DAY 3
FUNDAMENTAL COUNTING PRINCIPLE – STUDY GUIDE



1. Your guidance counselor offers you 4 different math courses, 5 different English courses, and 3 different social studies courses. How many different ways can you rearrange your schedule?

$$4 \cdot 5 \cdot 3 = 60$$

2. You take a five question multiple choice test. Each question has four choices (A, B, C, or D). How many different ways are there to answer the test?

$$4 \cdot 4 \cdot 4 \cdot 4 \cdot 4 = 1,024$$

3. Mrs. Berenson is trying to decide what to eat for lunch at the school cafeteria. She can choose between four different salads and three different sandwiches. How many choices does she have if she only wants one item for lunch?

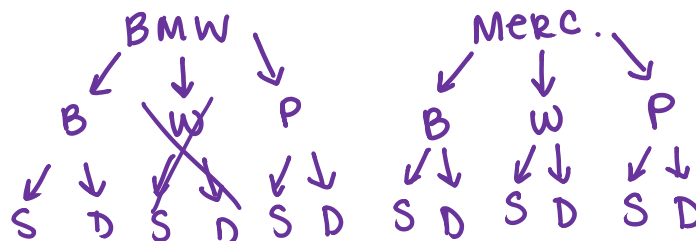
$$4 + 3 = 7$$

4. a. Luke is deciding on a new Power Wheels car to cruise around the neighborhood this summer. He can choose Mercedes or BMW cars. Each car comes in black, white, or pink. Each car also has a super trim level and deluxe trim level. How many different options can Luke go with?



$$2 \cdot 3 \cdot 2 = \boxed{12}$$

- b. Luke finds out that they no longer make white BMW cars. How many choices does he have now?



$\boxed{10}$