

# **Tree Diagram Examples**

Name: \_\_\_\_\_

7<sup>th</sup> Grade Math

1. A shirt is available in 3 sizes (small, medium, or large) with 4 colors (red, blue, black, or white). Draw a tree diagram to represent the possible outcomes.

2. David can order one of 2 pizzas (cheese or pepperoni) and one of 4 different ice-creams (vanilla, chocolate, strawberry, or superman). Draw a tree diagram to represent the possible outcomes.

3. Jack has 2 different suits (black or gray), 2 different shirts (white or cream) and 3 different pairs of shoes (buckle, lace-up or slip-on). Draw a tree diagram to wear a suit.

4. Alisa can get 2 kinds of markers (erasable or permanent) with 5 ink colors (red, black, blue, green, or orange). He can draw on pink or white paper. Draw a tree diagram to represent the possible outcomes.



3) You roll two dice.

a) Create a tree diagram to show all possible combinations (it will be BIG so write small!)

b) Find the probability of rolling a sum of 9.

c) Find the probability of rolling a 2 and 6 in any order.

4) Mary Poopins has three children: two girls (Sue and Karen) and one boy (David). After lunch and dinner, one child is chosen at random to wash dishes.

a) If the same child can be chosen for both lunch and dinner, draw a tree diagram to show the sample space of all the possible outcomes of who will wash dishes after lunch and dinner on Saturday.

b) Find the probability that one boy and one girl will wash dishes after lunch and dinner.

c) Find the probability that the same child is chosen to wash dishes after each meal.