

Practice: Sample Spaces

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Solve the problem.

1. A theater uses a letter to show which row a seat is in, and a number to show the column the seat is in. If there are eight rows and ten columns, make a table to show the sample space for the seats.

A coin is tossed three times.

2.
 - a. Draw a tree diagram that shows all the possible outcomes of how the coin will land.
 - b. Find the probability that the coin will land heads up all three times or tails up all three times. _____
3. A pizza company makes pizza in three different sizes, small, medium, and large. There are four possible toppings, pepperoni, sausage, green pepper, and mushroom. How many different kinds of pizza with one topping are available? _____

Susan, Joanne, and Diane are triplets. Susan has red, blue, green, and yellow sweaters. Joanne has green, red, purple, and white sweaters. Diane's sweaters are red, blue, purple, and mauve. Each girl has only one sweater of each color, and will pick a sweater to wear at random. Find each probability.

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| <ol style="list-style-type: none"> 4. $P(\text{each girl chooses a different color})$
_____ 6. $P(\text{two girls choose the same color, and the third chooses a different color})$
_____ | <ol style="list-style-type: none"> 5. $P(\text{each girl chooses the same color})$
_____ 7. $P(\text{each girl chooses a red sweater})$
_____ |
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