

## Assignment : Probability

Date \_\_\_\_\_

**Find the number of possible outcomes in the sample space.**

- 1) A spinner can land on either red, blue, or green. You spin five times.
- 2) A pizza stand offers both hand-tossed and pan pizza. Customers can add any combination of the eight available toppings.
- 3) The chess club must decide when and where to meet for a practice. The possible days are Monday, Tuesday, Wednesday, or Thursday. The possible times are 3, 4, or 5 p.m. There are seven classrooms available.
- 4) A pizza stand offers both hand-tossed and pan pizza. Customers can add any combination of the nine available toppings.

**Find the probability.**

- 5) A basket contains four apples and eight peaches. You randomly select a piece of fruit and then return it to the basket. Then you randomly select another piece of fruit. Both pieces of fruit are apples.
- 6) Your sock drawer has two white socks, four brown socks, and six black socks. You randomly pick two socks and get a matching pair of black socks.
- 7) There are eight nickels and four dimes in your pocket. You randomly pick a coin out of your pocket and then return it to your pocket. Then you randomly pick another coin. Both times the coin is a nickel.
- 8) You roll a fair six-sided die twice. The first roll shows a three and the second roll shows a five.
- 9) You flip a coin twice. The first flip lands heads-up and the second flip lands tails-up.
- 10) Your sock drawer has two white socks, two brown socks, and two black socks. You randomly pick two socks and get a matching pair of black socks.

## Answers to Assignment : Probability

1) 243

5)  $\frac{1}{9} \approx 0.111$

9)  $\frac{1}{4} = 0.25$

2) 512

6)  $\frac{5}{22} \approx 0.227$

10)  $\frac{1}{15} \approx 0.067$

3) 84

7)  $\frac{4}{9} \approx 0.444$

4) 1024

8)  $\frac{1}{36} \approx 0.028$

