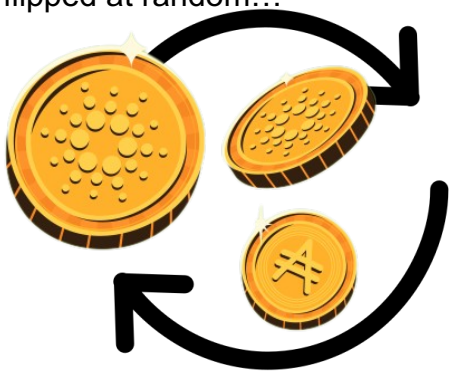
Name: _____

Probability Practice: Three Coins

If three 2-sided fair coins are flipped at random…



Directions: Expressed as a fraction in lowest terms, answer each of the following.

1.) What is the probability of the first coin landing on heads? _____

2.) What is the probability of all three coins landing on tails? _____

3.) What is the probability of **none** of the coins landing on heads? _____

4.) What is the probability of *at least* one of the coins landing on tails? _____

5.) What is the probability of *exactly* two of the coins landing on heads? _____

6.) What is the probability of all three coins landing on the same side? _____

7.) What is the probability of *at least* two coins **not** landing on tails? _____

8.) What is the probability of second coin landing tails and the first and third coins both landing on heads? _____

9.) What is the probability that *at least* two of the coins will land on the same side? _____

10.) What is the probability that *at least* one coin will land on heads and *at least* will land on tails? _____

ANSWER KEY

1.) What is the probability of the first coin landing on heads? $\frac{1}{2}$

2.) What is the probability of all three coins landing on tails? $\frac{1}{8}$

3.) What is the probability of **none** of the coins landing on heads? 0

4.) What is the probability of *at least* one of the coins landing on tails? $\frac{7}{8}$

5.) What is the probability of *exactly* two of the coins landing on heads? $\frac{3}{8}$

6.) What is the probability of all three coins landing on the same side? $\frac{1}{4}$

7.) What is the probability of *at least* two coins **not** landing on tails? $\frac{1}{2}$

8.) What is the probability of second coin landing tails and the first and third coins both landing on heads? $\frac{1}{8}$

9.) What is the probability that *at least* two of the coins will land on the same side? 1

10.) What is the probability that *at least* one coin will land on heads and *at least* will land on tails? $\frac{3}{4}$