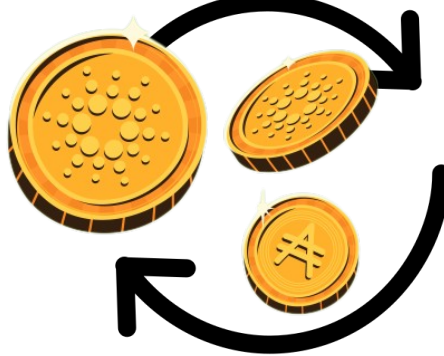


Name: _____

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? | $\frac{1}{8}$ |
| 4.) What is the probability of <i>at least</i> one of the coins landing on tails? | $\frac{7}{8}$ |
| 5.) What is the probability of <i>exactly</i> 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 <i>at least</i> 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 <i>at least</i> two of the coins will land on the same side? | 1 |
| 10.) What is the probability that <i>at least</i> one coin will land on heads and <i>at least</i> will land on tails? | $\frac{3}{4}$ |