



Practice with Permutations

Please choose the best answer to each of the following questions.

1. The odds of rolling a 1 on a die or flipping a heads on a coin is

$$\frac{1}{2}$$

$$\frac{7}{12}$$

$$\frac{3}{4}$$

2. If I toss a coin 100 times, how many permutations are there?

$$2^{100}$$

$$2^{50} + 2^{50}$$

$$100^2$$

3. A die is rolled six times. How many permutations are there?

$$6^4$$

$$4^6$$

$$6^6$$

4. 6 pieces of differently flavored pastries can be distributed among 6 kids how many different ways?

6!

8!

12!

5. How many ways can 6 girls stand in line?

6^6

6×6

6!

6. In a single throw of the die, what is the probability of rolling number greater than 4?

$\frac{2}{3}$

$\frac{1}{2}$

$\frac{1}{3}$

7. How many ways can a order a pizza from a selection of 10 pizzas?

1,000

100

10

8. To find the number of permutations when each item is drawn from a different pool, we should multiply the number in each pool by $r!$, where $r = \#$ of groups.

True

False

9. How many two letter permutations are possible in the word HAND?

18

24

12