

Probability of a Chance Event - Guided Lesson Explanation**Explanation#1**

There are 7 possible outcomes because there are 7 marbles.

$$\text{The Probability of 2 gray} = \frac{2}{7} = 28.5\%$$

$$\text{The Probability of 1 gray} = \frac{1}{7} = 14.3\%$$

$$\text{The Probability of 4 black} = \frac{4}{7} = 57.1\%$$

If the value is 50% or greater, the value is closer to 1. Otherwise if it is less than 50%, it is closer to 0.

White marble: Closer to 0

Gray marble: Closer to 0

Black marble: Closer to 1

Explanation#2

A die has 6 sides, numbered 1, 2, 3, 4, 5, and 6.

$$\text{The chance of rolling any the numbers above} = \frac{1}{6}$$

Answer as a decimal. Then convert answer to a percentage.

$$\frac{1}{6} = 0.1666\dots = 16.66\dots\%$$

Round to the nearest tenth. To the nearest tenth, $P(3) = 16.7\%$

Explanation#3

The probability is the number of favorable outcomes out of the number of possible outcomes.

Flipping a coin has two possibilities: heads or tails.

$$P(\text{heads}) = \frac{1}{2}$$

