

Write impossible, unlikely, as likely as not, likely, or certain to describe each event.

Event	Likelihood
Anthony rolls a number less than 7 on a standard number cube. (dice)	certain
A shoe selected from a pair of shoes goes on the right foot.	as likely as not
Katrina correctly guesses the last digit of a phone number	unlikely
Max pulls a green marble from a bag of all green marbles	certain
A randomly selected month contains the letter R	likely

Rolling a number cube

Tossing a coin

Spinning a game spinner

Probably Probability

Directions: Follow each set of instructions below. Convert the fractional answer into a decimal, rounding to the nearest hundredth. Add up all of the decimal answers.

Spin the spinner once. Find the probability of each event happening.

1. $P(9) = \frac{1}{12}$

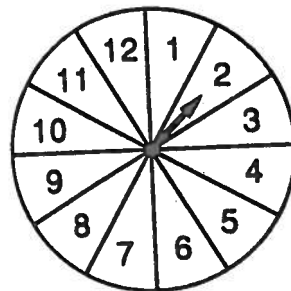
2. $P(\text{multiple of } 2) = \frac{6}{12} = \frac{1}{2}$

3. $P(\text{even number}) = \frac{2, 4, 6, 8, 10, 12}{12} = \frac{6}{12} = \frac{1}{2}$

4. $P(\text{prime number}) = \frac{1, 3, 5, 7, 11}{12} = \frac{5}{12} = \frac{1}{2}$

5. $P(\text{number} < 8) = \frac{1, 2, 3, 4, 5, 6, 7}{12} = \frac{7}{12}$

6. $P(\text{factor of } 8) = \frac{\text{just } 8}{12} = \frac{1}{12}$



A laundry basket contains 3 red socks, 5 orange socks, 4 blue socks, and 8 black socks. Without looking, choose a sock. What is the probability for each event? 20 total

7. $P(\text{orange}) = \frac{5}{20} = \frac{1}{4} = 25\%$

8. $P(\text{blue}) = \frac{4}{20} = \frac{1}{5} = 20\%$

9. $P(\text{not blue}) = \frac{3+5+8}{20} = \frac{16}{20} = \frac{4}{5} = 80\%$

10. $P(\text{white}) = \emptyset$

11. $P(\text{red or blue}) = \frac{3+4}{20} = \frac{7}{20} = 35\%$

$P(\text{orange + b}) = \frac{9}{20} = 45\%$

