

TAKS Objective 9
TEK 8.11B
Tutorial
(Grades 9, 10, and 11)

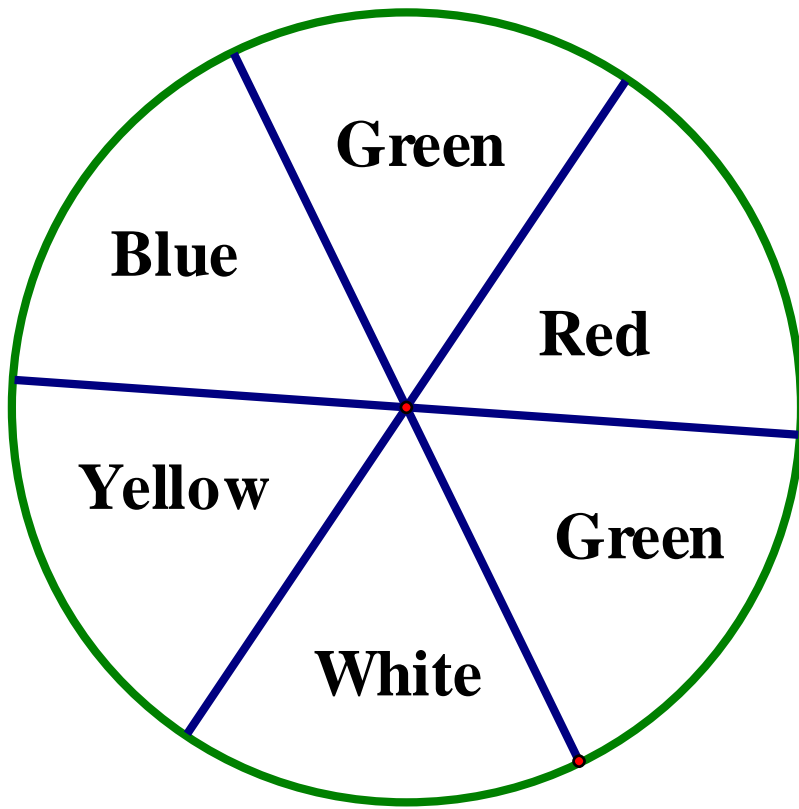
...use theoretical probabilities and experimental results to make predictions and decisions.

What is the difference between theoretical probability and experimental probability?

Theoretical probability is the probability you have always found.

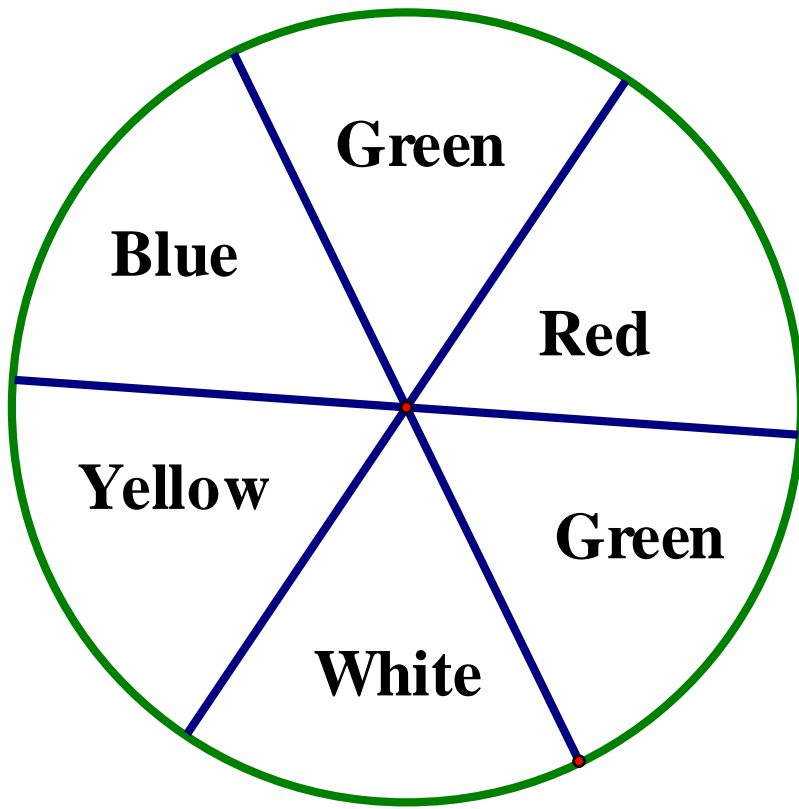
Experimental probability is the probability based on actual results.

What is the theoretical probability of the spinner landing on white?



Answer:
 $\frac{1}{6}$

What is the theoretical probability of the spinner landing on white or green?



Answer:
 $\frac{1}{2}$

What is the experimental probability of the spinner landing on blue?

Color	Frequency
Green	8
Blue	12
Red	5
White	10
Yellow	15

Answer:
 $6/25$

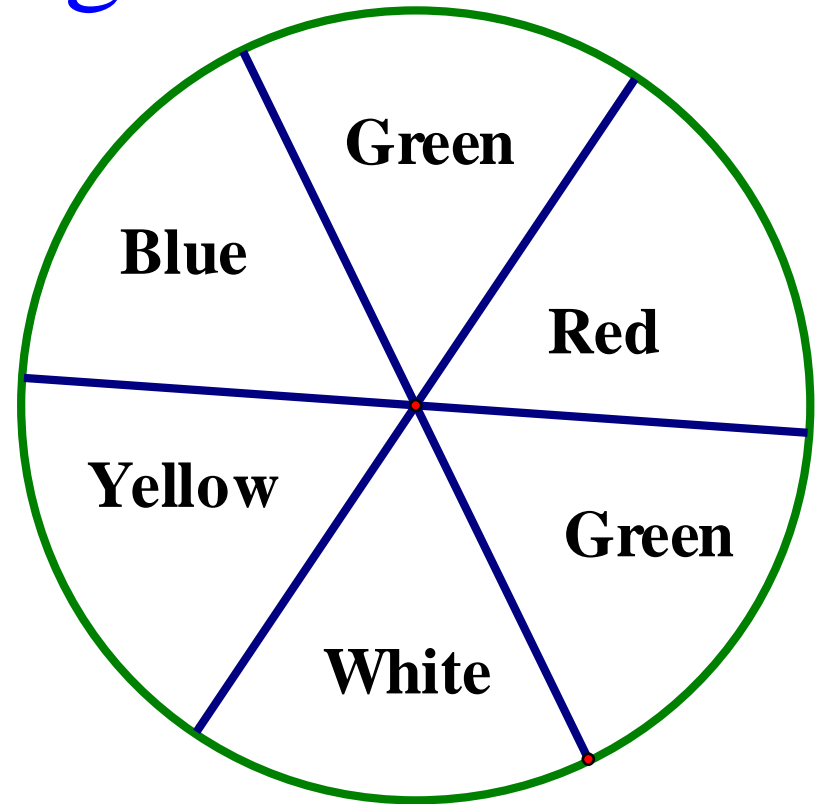
What is the experimental probability of the spinner landing on red or green?

Color	Frequency
Green	8
Blue	12
Red	5
White	10
Yellow	15

Answer:
13/50

What is the difference between the theoretical and experimental probability of the spinner landing on red?

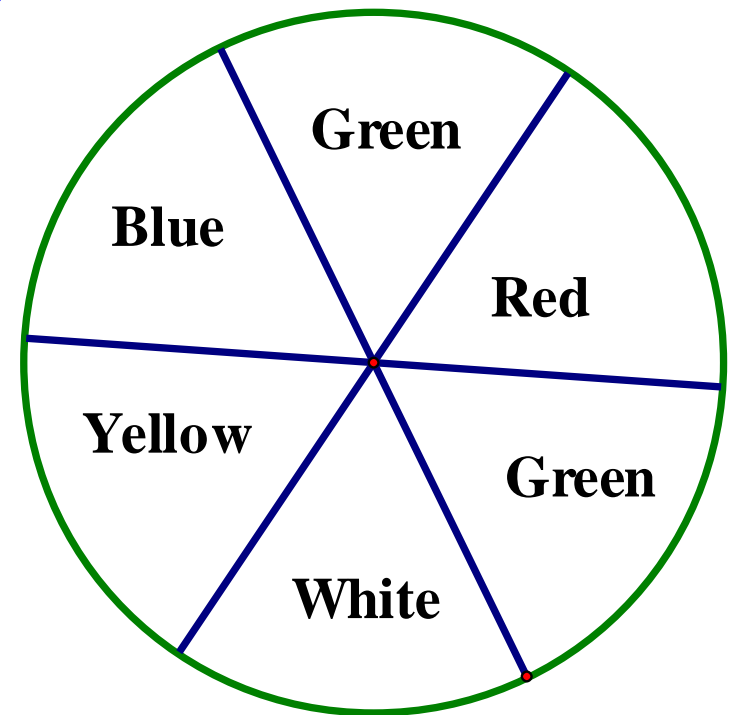
Color	Frequency
Green	8
Blue	12
Red	5
White	10
Yellow	15



$$\frac{1}{6} - \frac{5}{50} = \frac{1}{15}$$

Given the experimental results below, if the spinner were spun 175 times, how many times would it be expected to land on yellow?

Color	Frequency
Green	8
Blue	12
Red	5
White	10
Yellow	15



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