

10 - 1
Introduction to
Probability

probability: measure of chance
from 0 to 1



probability of 0 : never happens

probability of 1 : always happens



How to find probability:

$$P(E) = \frac{\text{\# of favorable outcomes}}{\text{total outcomes}}$$

Find probability using the spinner.

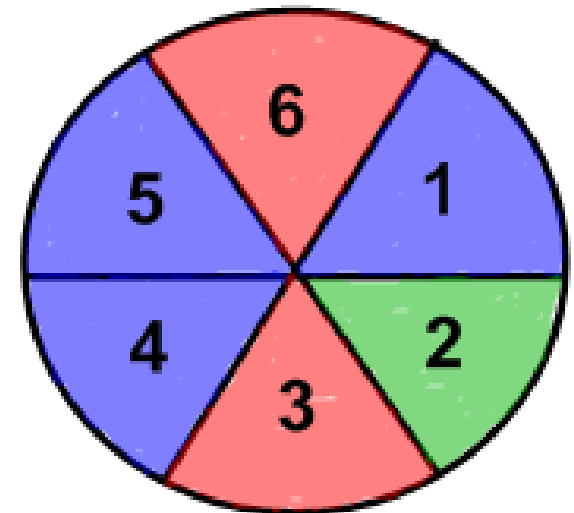


Ex: $P(2) = \frac{1}{6}$

Ex: $P(\text{blue}) = \frac{3}{6} = \frac{1}{2}$

Ex: $P(10) = 0$

Ex: $P(\text{blue, red, or green}) = \frac{5}{6}$



A bag contains 3 orange, 4 green, 4 blue, and 4 yellow M&Ms. Give each answer as a percent rounded to the nearest tenth.



Ex: P(green or yellow)

$$\frac{8}{15}$$

53.3%
53333...

Ex: P(not orange)

$$\frac{12}{15}$$

80

80%

Odds of an event:



$$\frac{\text{\# of favorable outcomes}}{\text{\# of unfavorable outcomes}}$$

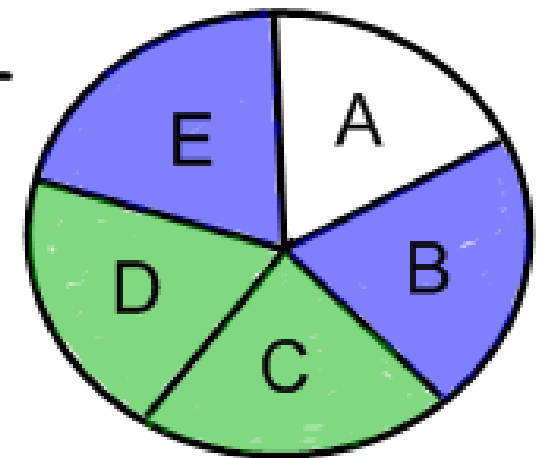
Find the odds in favor of each event using the spinner.



Ex: B $\frac{1}{4}$ 1:4 1 to 4

Ex: green $\frac{2}{3}$ 2:3

Ex: not A $\frac{\text{not A}}{A}$ $\frac{4}{1}$





Homework:

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