

Probability

$$P(\text{event}) = \frac{\text{\# of ways the event can occur}}{\text{\# of possible outcomes}}$$

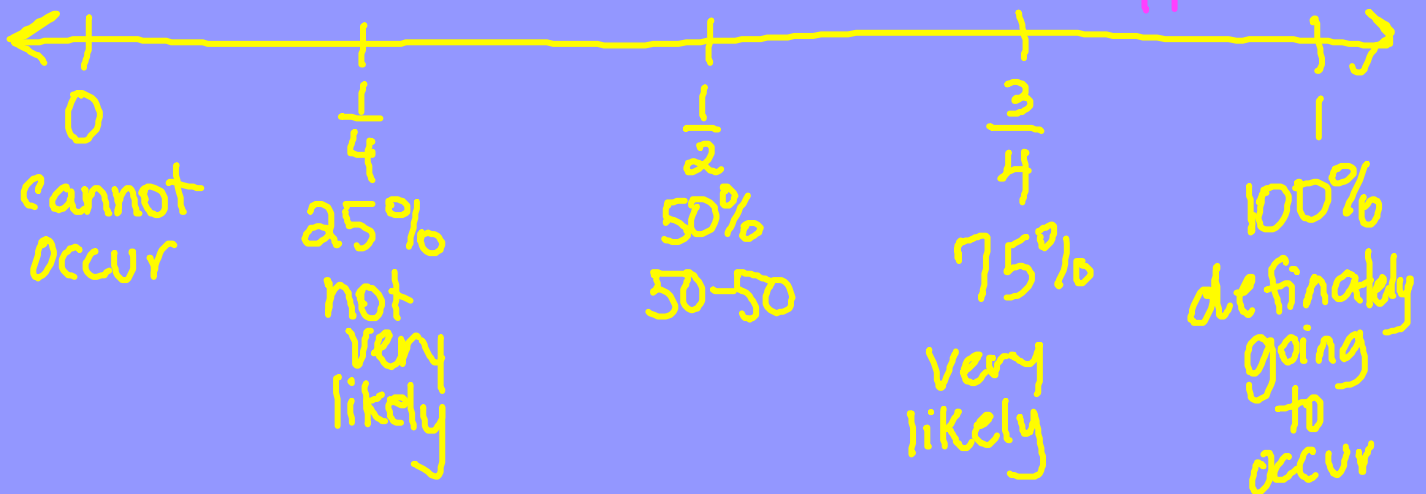
$$P(\text{heads}) = \frac{1}{2}$$

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

5¢, 10¢, 15¢, ... \$1

$$P(\$1) = \frac{1}{20}$$

→ closer you are to 1, the more likely the event will happen



counters (1-10)

$$P(\text{less than 3}) = \frac{2}{10} = \frac{1}{5}$$

$$P(7 \text{ or higher}) = \frac{4}{10} = \frac{2}{5}$$

$$P(\text{even \#}) = \frac{5}{10} = \frac{1}{2}$$

$$P(\text{odd \#}) = \frac{5}{10} = \frac{1}{2}$$

> 1 whole

Complementary events — one or the other must take place, but they can't happen at the same time (sum is 1)

30% chance of rain

↳ 70% chance of no rain

40% chance of winning the game

↳ 60% chance of not winning the game

$$P(5) = \frac{1}{6}$$

Theoretical Probability

1st - 3

2nd - 5

3rd - 5

4th - 4

5th - 6

6th - 4

Experimental
Probability