

Date: _____

Learning Goal

simple probability - probability of a _____
event occurring

Examples:

compound probability - probability of multiple
_____ events occurring

Examples:

conditional probability - probability of an event
occurring knowing that some other related event
has already occurred

Examples:

Not!

The probability of being two dealt two Aces in a row in a game of poker is $12/2652$.

What is the fractional probability of NOT being dealt two Aces?

Not!

The decimal probability of flipping three heads in a row is 0.125.

What is the decimal probability of NOT flipping three heads in a row?

Not!

The probability of rolling a sum of 7 on two dice is 16.7%.

What is the percent probability of NOT rolling a sum of 7 on two dice?

Beyond Dice, Cards and Coins

There is an equal chance of having a boy or a girl. A couple decides that they are going to have three children.

What is the probability that all three children will be boys?

Beyond Dice, Cards and Coins

This year, Tim Horton's Roll Up the Rim To Win promotion boasted odds of winning at 1 in 6.

Based on these odds, **what is the probability that you would win**

a. Twice in a row?

b. Five times in a row?

c. Twenty times in a row?

Beyond Dice, Cards and Coins

This year, Tim Horton's Roll Up the Rim To Win promotion boasted odds of winning at 1 in 6.

Based on these odds, **what is the probability that you would**

a. Lose 3 times in a row?

b. Lose 6 times in a row?

c. Lose 20 times in a row?

Beyond Dice, Cards and Coins

This year, Tim Horton's Roll Up the Rim To Win promotion boasted odds of winning at 1 in 6.

In one of their regions, they distributed 46,571,280 cups.

How many of these cups were winners?

Beyond Dice, Cards and Coins



When playing **LOTTO 649**, players choose 6 numbers between 1 and 49 (get it?!)

Each number must be different.

What is your probability of winning the LOTTO?

Beyond Dice, Cards and Coins

Some stats about 911 calls in Montreal during 2010

1,405,309 total calls

87,416 non-emergency calls

772,920	Police Related
112,425	Public Works Related
56,212	Fire Related
252,956	Ambulance Related
210,796	Other
772,920	Made from a Land Line
632,389	Made from a Cell Phone