NOTES

Experimental and Theoretical Probability

Experimental Probability: Probability based on experimental data or observations.

Theoretical Probability: Probability that is calculated as the ratio of the number of favorable outcomes to the number of possible outcomes.

| Landed on side | Landed on top | Landed on bottom |

P(side)   P(top)   P(bottom)

A **simulation** acts out an event so that you can find the outcomes. Each time you simulate the problem you complete one **trial**.

The table below shows the number of bagels purchased at a bagel shop one day at lunch.

Wheat	Egg	Plain	Rye	Cinnamon Raisin	Oat Bran	Other
16	8	24	8	6	12	16

Using the experimental data in the table, express as a percent, rounded to the nearest whole, the probability that a customer will purchase a wheat or rye bagel.

P (wheat or rye) =

If the bagel shop sells 105 bagels tomorrow, how many would you expect to be wheat or rye?