

Timed Expectations



(no Warm Up Today)

Each Team needs to connect 4 calculators to the Hub using the cables near the door.

TI Navigator

- * Log In
- * Screen Shot
- * Quick Poll
- * Learn Check

Vocabulary

Random: Does not have a pattern

Success: Desired result of an experiment

Trial: Process of getting a result

Emperical Probability: Probability based on an experiment

Examples:

Theoretical Probability: Probability based on what can occur

Examples:



Coin Toss Activity

Law of Large Numbers:

The more trials you have, the closer you will get to the Theoretical Probability.

Sample Space: set of all possible outcomes

Outcome/Event: the result of an experiment

Random Sample:

Each outcome has the same chance of being selected. If the chances are not equal then it is said to be bias (unfair).

Fair (Unbias): All outcomes are equally likely to occur.

Unfair(Bias): One outcome is favored over another

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Examples

1. Each positive integer from one to five inclusive is written on a piece of paper, and the pieces of paper are shuffled. List a sample space for the outcome of drawing one piece of paper.

Any one of the five numbers is equally likely to be drawn. The sample space is $\{1, 2, 3, 4, 5\}$.

2. Two jelly beans are to be drawn from a jar known to contain only red jelly beans and green jelly beans. List a sample space for the result of the drawing.

Since the jelly beans must be red or green, a sample space is $\{(R,G), (R,R), (G,R), (G,G)\}$

3. A card is drawn from a deck of face cards.

Tree Diagrams

1) Draw branches for each of the outcomes of the first event.

2) From each of those branches, draw branches for the second event.

1. Draw a tree diagram for the outcomes of flipping three coins.

2. Draw a tree diagram for the outcomes of rolling two dice.

3. Draw a tree diagram for the outcomes of flipping a coin and rolling a die.

Probability Assignment 1 Handout

1. Student/Parent Information Sheet
2. Syllabus
3. Get supplies
4. Complete Day 1 Homework