

MATH170U35

Probability

Question 11

In the chart in column two, record the theoretical probability as a decimal for each sum (found in problem #8). Find two dice. Roll the dice 50 times. Keep a tally of the results in column three of the chart. For each of the sums, write the tally as a number in column four. Based on 50 tosses, write the actual outcome for each sum as a fraction in column five, and then write the actual outcome for each sum as a decimal in the last column. In the answer box below write the sum, theoretical decimal probability, actual number of occurrences for each sum, actual outcomes as a fraction, and the actual outcomes as a decimal. For example: If the sum of three was actually rolled 6 times out of 50, in the answer box you would write: Three, 0.06, 6, 6/50, and 0.12.

POSSIBLE SUMS	THEORETICAL OUTCOME AS A DECIMAL	ACTUAL TALLY	NUMBER OF OCCURRENCES	ACTUAL OUTCOME AS A FRACTION (50 TRIALS)	ACTUAL OUTCOME AS A DECIMAL (50 TRIALS)
TWO					
THREE					
FOUR					
FIVE					
SIX					
SEVEN					
EIGHT					
NINE					
TEN					
ELEVEN					
TWELVE					
TOTAL					