

Experimental and Theoretical Probability – Dice Differences

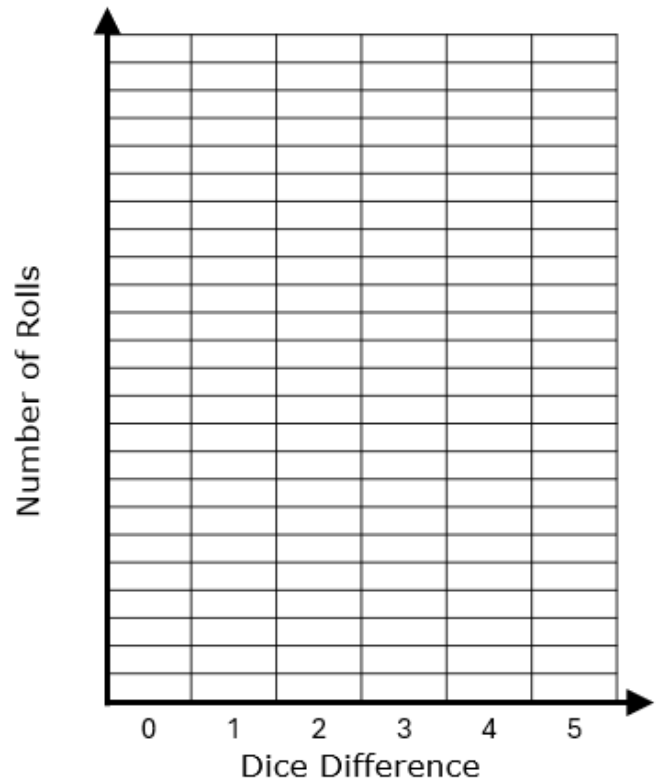
(a)

Roll two dice. Find the difference between the two numbers shown. Repeat the experiment 60 times, tallying and totalling the results.

Dice Difference	Tally	Total
0		
1		
2		
3		
4		
5		

(b)

Show your information as a graph.



(c)

Complete the sample space to show all possible dice differences.

	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						

(d)

Calculate the experimental and theoretical probabilities for different outcomes. Give your answers to 3 decimal places.

Outcome	Experimental Probability	Theoretical Probability
2		
0		
5		
1		
3 or 4		
Less than 2		

(e)

Compare the experimental and theoretical probabilities. What do you notice?