

Experimental and Theoretical Probability – Dice Sums

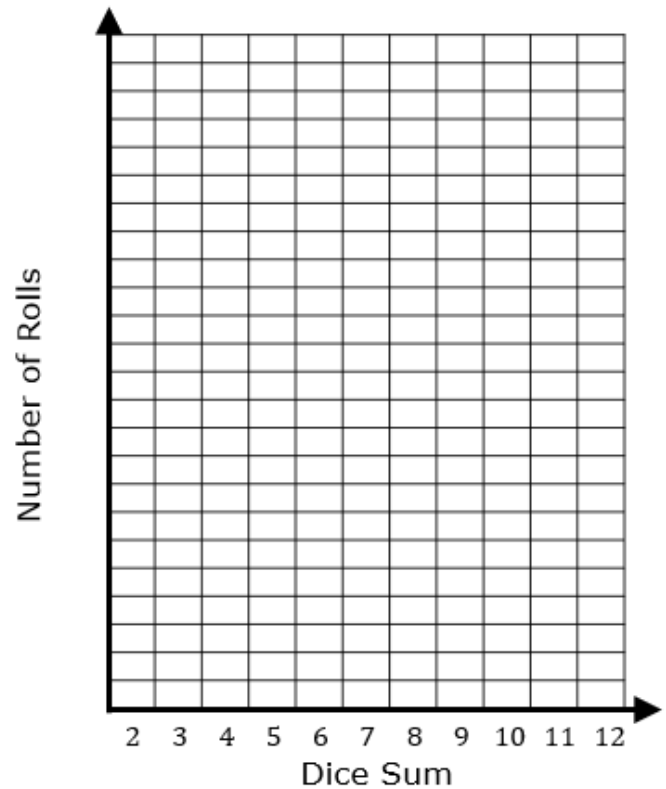
(a)

Roll two dice. Add together the two numbers shown. Repeat the experiment 60 times, tallying and totalling the results.

Dice Sum	Tally	Total
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

(b)

Show your information as a graph.



(c)

Complete the sample space to show all possible dice sums.

	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
12		
7		
10		
5		
3 or 4		
More than 8		

(e)

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