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| **Experimental and Theoretical Probability – Dice Differences** | |
| **(a)** | **(b)** |
| Roll two dice. Find the difference between the two numbers shown. Repeat the experiment 60 times, tallying and totalling the results. | Show your information as a graph. |
|  |
| |  |  |  | | --- | --- | --- | | Dice Difference | Tally | Total | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |
| **(c)** | **(d)** |
| Complete the sample space to show all possible dice differences. | Calculate the experimental and theoretical probabilities for different outcomes. Give your answers to 3 decimal places. |
| |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | |  |  |  |  |  |  |  | | |  |  |  | | --- | --- | --- | | Outcome | Experimental Probability | Theoretical Probability | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | or |  |  | | Less than |  |  | |
| **(e)** | |
| Compare the experimental and theoretical probabilities. What do you notice? | |