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| **Comparing Theoretical and Experimental Probabilities of Two Independent Events** |
| Determines the theoretical probability of two independent events The theoretical probability of rolling5 is .The theoretical probability of tossingheads is .So, the theoretical probability of rolling 5 and tossing heads is:× = , or 0.08$\overbar{3}$, or 8.$\overbar{3}$% | Explains how to determine the experimental probability of two independent eventsI would conduct the experiment many times, then divide the number of favourable outcomes by the number of times I conducted the experiment. | Uses theoretical probabilities to predict the outcomes of an experimentThe theoretical probability of rolling 5 on a number cube and getting a head on a coin toss is .In an experiment of 100 trials, I would expect this outcome to occur× 100 = 8.333… times, or about 8 times. | Explains how fairness in an experiment or game affects the probabilitiesAn unfair coin or number cube affects the experimental probability, but not the theoretical probability. A set of outcomes where some are more likely than others affects the fairness of a game. |
| **Observations/Documentation** |
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