11.2 Probability of Compound Events Day 1

TSW understand concept of probability
*use possibility diagrams to find probability of compound events

**Vocabulary- How to find Probability of Compound Event**

**Find the probability of landing heads, then tails when tossing a coin twice. Be sure to use a probability tree diagram.**

**Example 4** **Use a possibility diagram to find the probability of a compound event.**

**Use a possibility diagram to find each probability.**

**a)** A fair coin and a fair six-sided number die are tossed together. Find the probability of showing heads and a 5.

**Method 1** **Method 2**

**b)** Two fair six-sided number dice are rolled. Find the probability that the sum of the two numbers rolled is a prime number.

**c)** Two fair four-sided number dice, one red ($R$) and one blue ($B$), are rolled, and the number on the bottom is recorded. The red number die has numbers 1, 2, 4, and 7. The blue number die has numbers 2, 5, 8, and 9. Find the probability that the number recorded from the blue number die is more than 3 greater than the number recorded from the red number die. That is, find $P(B - R > 3)$.

**d)** The two spinners shown are spun. Find the probability that the pointers stop at 1 on Spinner 1 and blue ($B$) on Spinner 2.