1. A container of Halloween treats contains 10 orange candies, 8 black candies, and 5 pastel-colored candies left over from Easter. If a child randomly selects two candies, what is the probability they are both orange? *(6 points)*

2. A witch and a vampire roll two dice. If the sum of the dice is 8 or larger, the witch pays the vampire $3. If the sum of the dice is between 5 and 7 (inclusive), the vampire pays the witch $5. If the sum is less than 5, the witch pays the vampire $1. Find the expected value of the game from the witch's point of view. Which player has the advantage? *(7 points)*

3. If the witch rolls two dice, find the probability that the sum is 8. If the witch rolls two dice, but can't see the outcomes, and the vampire tells her that exactly one of the two dice is a 5, what is the probability now that the sum of the two is 8? *(7 points)*