**BLM 7.SP.6.2: Probability Problems Involving Two Independent Events**

1. Elliot puts a quarter, a dime, a nickel, and a penny into a container. Elliot then shakes the container, spills out one coin, places the coin back in the container, shakes the container again, and spills out another coin. What is the probability that the sum of the two spilled coins will be more than 25 cents?
2. Ramone has two pairs of orange socks, a pair of blue socks, and two pairs of green socks. She also has an orange shirt, two blue shirts, and a green shirt. If she selects a pair of socks at random, and a shirt at random, what is the probability that her shirt and socks will be the same colour?
3. A computer game randomly selects two numbers from 1 to 9 and multiplies the numbers.

a) What is the probability that the product will be greater than or equal to 50?

b) If the range of the numbers multiplied is increased to include all the numbers from 0 to 10, what is the probability that the product will be greater than or equal to zero?

1. Samantha’s little brother removed all the labels from the cans of soup in the pantry. He also removed the labels from the canned fruit. There are four cans of tomato soup, two cans of chicken noodle soup, and one can of cream of mushroom soup. There are two cans of peaches, and one can of pears. The soup and fruit come in cans of different sizes. If one can of soup is opened, and one can of fruit is opened, what is the probability that the combination will be chicken noodle soup and peaches?
2. If a person rolls two number cubes, what is the probability that the sum of the cubes will be 9 or greater?
3. Write your own probability problem involving two independent events. Include the solution to the problem.