Homework: Probability Rules

1. List the sample space of selecting 3 of the following names (order does not matter): David, Bill, Frank, Rick, and Carl

2. Determine if the following is a probability model:

Name	Probability
Call of Duty	0.39
Resident Evil 6	0.21
Gears of War 3	0.10
Super Mario Brothers	0.52

3. Determine if the following is a probability model:

Color	Probability
Red	0.30
Blue	0.20
Yellow	0.40
Black	0.10

4. Construct a probability model for the following frequency table:

Item	Frequency
Television	32
Computer	41
Radio	5
Speaker	2
Book	51

5. A particular campus has 1025 students with 500 women and 525 men. Find the probability of picking one person at random and it is a woman (round to 2 decimal places if necessary).

6. A single die is rolled, find the probability that the number is 2 or 6. Round to 2 decimal places if necessary.

7. A pair of dice is rolled, find the probability that the sum is 12. Round to 2 decimal places if necessary.

8. Given a standard deck of cards, if one card is pulled out at random, find the probability it is a jack. Round to 2 decimal places if necessary.

9. If a die is rolled one time, what is the probability of getting a number less than 5 or an even number?

10. A card is drawn from a deck of cards, what is the probability of getting a red queen?

11. If you bought 20 tickets out of the 121 possible in a lottery, what is the probability that you will win?

12. If there are two apples, three oranges, and five bananas then find the probability of selecting one fruit at random and getting a banana.