TUTORIAL – Week 12 – Q

1: The tickets are marked from number 1 to 20. One ticket is chosen at random.
Find the probability that the ticket selected has a digit that is a multiple of number 3 or number 5.

2. Three chairs are arranged in a line, and three people randomly take seats.
What is the probability that the person with the middle height ends up in the middle seat?

3. Six chairs are arranged in a line, and three girls and three boys randomly pick seats.
What is the probability that the three girls end up in the three leftmost seats?

4. Five cans of paint (numbered 1 through 5) were delivered to a professional painter.
Unknown to her, some of the cans (1 and 2) are satin finish and the remaining cans (3, 4, and 5) are glossy finish.
Suppose she selects two cans at random for a particular job.
Let A denote the event that the painter selects the two cans of satin-finish paint, and
let B denote the event that the two cans have different finishes (one of satin and one of glossy).
Find P(A) and P(B).

5. A department in a company has 12 members: 8 males and 4 females. To gain greater insight into the employees' views of various benefits, the human resources office plans to form a focus group from members of this department.

Five departmental members will be selected at random from the department's members.

a. What is the probability that the focus group will only have males?
b. What is the probability that the focus group will have two males and three females?