

Patrick John S. Tomas

Quantitative Method – Assignment

- A. Consider an experiment of tossing a fair die first followed by tossing a fair coin, what is the probability that I get six and a head?

Tossing a Die (6) = $1/6$

Tossing a Coin (HEAD) = $1/2$

$$P = 1/6 * 1/2$$

P = 1/12 or 0.083

- B. How many different seating arrangements are possible if five women and four men are to be seated in a row of nine chairs without restrictions. What is the probability that in a seating arrangement the women sit together first and then men sit together?

$$9! = 362,880 \text{ ways}$$

P = 0.00159

- C. How many 2-digit numbers can be made from digits 1,2,3 and none of the digits are repeated? what is the probability of forming an even number?

$$3! = 6$$

Digits = {12, 13, 21, 23, 31, 32}

P = 2/6 or 1/3 or 0.333