Chapter 4: Introduction to Probability

Example 2

((26) ^ 3) * ((10) ^ 4)

Example 3

choose(3, 2)

Example 4

choose(52, 5)

Example 6

factorial(5) / factorial(5 - 2)

End-of-Chapter 4 Exercises

Exercise 2

choose(52, 7)

Exercise 3

probAcomp =
((365)*(364)*(363)*(362)*(361)*(360)*(359)*(358)
(357)(356)*(355)*(354)*(353)*(352)*(351)*(350)
(349)(348)*(347)*(346)) / ((365) ^ 20)

probA = 1 – probAcomp

NewprobAcomp = prod(365 : 346) / (365) ^ 20

NewprobA = 1 – NewprobAcomp

R Functions

1. choose(N,n) Number of combinations of n objects drawn from a larger set of N

2. factorial(N) Provides N ! (factorial) and equals N (N − 1)(N − 2)....(2)(1)

3. factorial(N)/factorial(N-n) Number of permutations of n objects drawn from a larger set of N