Assignment 17.2

A die marked A to E is rolled 50 times. Find the probability of getting a “D” exactly 5 times.

P(x=D) = 1/5

P(x=A,B,C,E) = 4/5

n = 50

P(5) = 50!/5!45! (P(x = D)^5\*P(x = A,B,C,E)^45)

= 2118760 \* ((1/5)^5\*(4/5)^45)

= 2118760 \* 0.00000001394

= 0.0295312043