**Homework 1**

1).. 250**C**2 = 31125

2).. 5!/(3!2!) = 10

3).. 1². 2³ = 8

4)..! (30**C**3)(3**C**3) + (30**C**3)(3**C**2) + (30**C**3)(3**C**1) + (30**C**3)(3**C**0) = 4060 + 12180 + 12180 + 4060

= 32480

5).. 6**C**3 = 20

6).. p(A) = 0

7).. (6**C**3) - (2**C**2)(4**C**1) = 16

8)

1. (25**C**14) - (2**C**1).(2**C**1).(2**C**1).(2**C**1).(2**C**1)

.(15**C**9) = 4407350

1. (2**C**2).(2**C**2).(2**C**2).(2**C**2).(2**C**2).(15**C**4)

= 1.1.1.1.1.1365= 1365