

1) ${}^{250}C_2 = 31125$

2) ${}^5C_2 = 10$

3) $2^3 = 8$

4) $30 \cdot 29 \cdot 28 = 24360$ OR ${}^{30}C_2 \cdot {}^3P_3 = 24360$

5) ${}^6C_3 = 20$

6) $(5/6)^3 = 0.42$

7) ${}^6C_3 - ({}^2C_2 \cdot {}^4C_1) = 16$

8) (a) $({}^2C_1)^5 \cdot {}^{20}C_9 = 10741760$ /// (b) $({}^2C_2)^5 \cdot {}^{15}C_4 = 1365$