Subject: Date:

1- $^{250}C_2 = 62,375$

2- $^nC_r = \frac{n!}{r!(n-r)!} = {}^5C_2 = 10$

3- $2^3 = 8$

4- $^{30}C_3 = 4060$

5- $^6C_3 = 20$

6- Prop of no seven in three rolls $= 5(\frac{5}{6})^3 = 0.5787$

$1 - 0.5787 = 0.4213 \rightarrow 42.1390$

7- 3 books from 6 $\rightarrow {}^6C_3 = 20$

3 books from 11 $\rightarrow {}^4C_3 = 4$

2 cases $\rightarrow {}^2C_1 = 2$

result $= 20 \times 4 \times 2 = 160$

8- @ $^{20}C_7 = 187960$

(b) ${}^2C_2 \times {}^2C_2 \times {}^2C_2 \times {}^2C_2 \times {}^{20}C_4 = 4845$