

Subject: _____

Date: _____

$$1 - {}^{25}C_2 = 62,375$$

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

$$3 - 2^3 = 8$$

$$4 - {}^{30}C_3 = 4060$$

$$5 - {}^6C_3 = 20$$

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

$$1 - 0.5787 = 0.4213 \rightarrow 42.13\%$$

$$7 - 2 \text{ books from 6} \rightarrow {}^6C_2 = 20$$

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

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

$$\text{result} = 20 + 4 + 2 = 26$$

$$8 - @ 20 \quad {}^{20}C_2 = 187960$$

$$⑨ \quad {}^2C_2 \times {}^2C_2 \times {}^2C_2 \times {}^2C_2 \times {}^{20}C_4 = 4845$$