

$$7. \quad P(2 \text{ students not having same birthday}) = 0.992$$

$$P(2 \text{ students having same birthday}) = 1 - 0.992 = 0.008$$

$$8. \quad \begin{aligned} \text{no. of red balls} &= 3 \\ \text{no. of black balls} &= 5 \end{aligned}$$

$$\begin{aligned} \text{total balls} &= 3 + 5 \\ &= 8 \end{aligned}$$

$$P(\text{red ball}) = \frac{3}{8}$$

$$\begin{aligned} P(\text{not red ball}) &= 1 - \frac{3}{8} \\ &= \frac{5}{8} \end{aligned}$$

$$9. \quad \text{no. of red marbles} = 5$$

$$\text{no. of white marbles} = 8$$

$$\text{no. of green marbles} = 4$$

$$\begin{aligned} \text{total marbles} &= 5 + 8 + 4 \\ &= 17 \end{aligned}$$

$$P(\text{red marbles}) = \frac{5}{17}$$

$$P(\text{white marble}) = \frac{8}{17}$$

$$P(\text{not green}) = \frac{5+8}{17} = \frac{13}{17}$$