

6 (a)  $1 - \left(\frac{5}{6}\right)^4$

(b)  $1 - \left(\frac{35}{36}\right)^{24}$

7 (a)  $1 - \frac{\binom{27}{3}}{\binom{50}{3}}$

(b)  $\frac{\binom{23}{1}\binom{27}{2} + \binom{23}{2}\binom{27}{1}}{\binom{50}{3}}$

8  $\frac{1}{4!}$

9

(a)  $\frac{5!}{7!}$

(b)  $\frac{\binom{7}{3} 4!}{7!}$

11

(a)  $\frac{10 \times 4}{\binom{52}{5}}$

(b)  $\frac{10 \times 4^5 - 10 \times 4}{\binom{52}{5}}$

(c)  $\frac{\binom{12}{1}\binom{48}{1}}{\binom{52}{5}}$

(d)  $\frac{\binom{12}{2}\binom{4}{3}\binom{4}{2} 2}{\binom{52}{5}}$

14

(a) 
$$\begin{cases} s_1 & r \leq 365 \\ s_1 & r > 365 \end{cases} \quad 1 - \frac{365 \times 364 \times 363 \times \dots \times (365 - r + 1)}{(365)^r}$$

(b) 
$$\begin{cases} 1 - \frac{12 \times 11 \times \dots \times (12 - r + 1)}{(12)^r} & \text{si } r \leq 12 \\ 1 & \text{si } r > 12 \end{cases}$$

15

(a) 
$$P(\text{Accept}) = \begin{cases} \frac{\binom{100-x}{5}}{\binom{100}{5}} & \text{si } x \leq 95 \\ 0 & \text{si } x > 95 \end{cases}$$

$X = \text{Número de artículos defectuosos}$

(b)  $\frac{\binom{90}{n}}{\binom{100}{n}}$  y usar  $R$