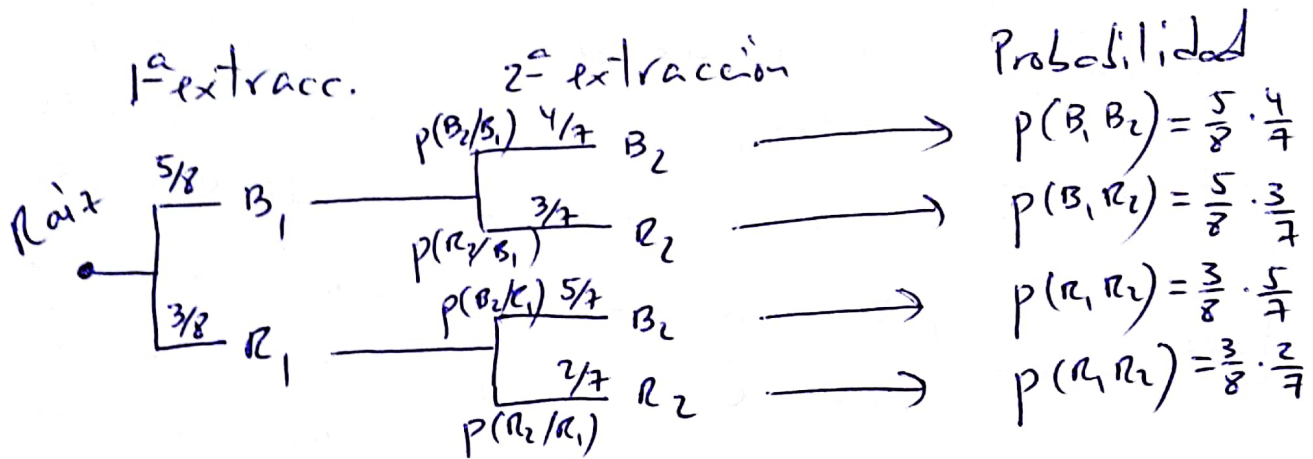
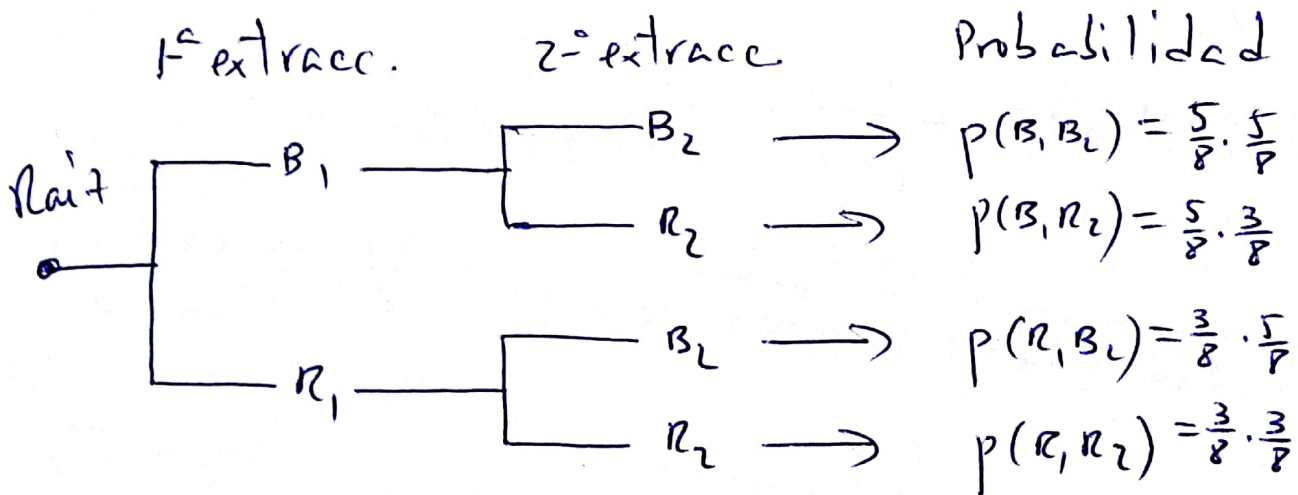


② a) Sin devolución



$$\begin{aligned}
 p(2 \text{ bolas mismo color}) &= p(B_1, B_2) + p(R_1, R_2) = \frac{5}{8} \cdot \frac{4}{7} + \frac{3}{8} \cdot \frac{2}{7} = \\
 &= \frac{20+6}{56} = \frac{26}{56} = \boxed{\frac{13}{28}} \approx \boxed{0,4643} \approx \boxed{46,43\%}
 \end{aligned}$$

b) Con devolución

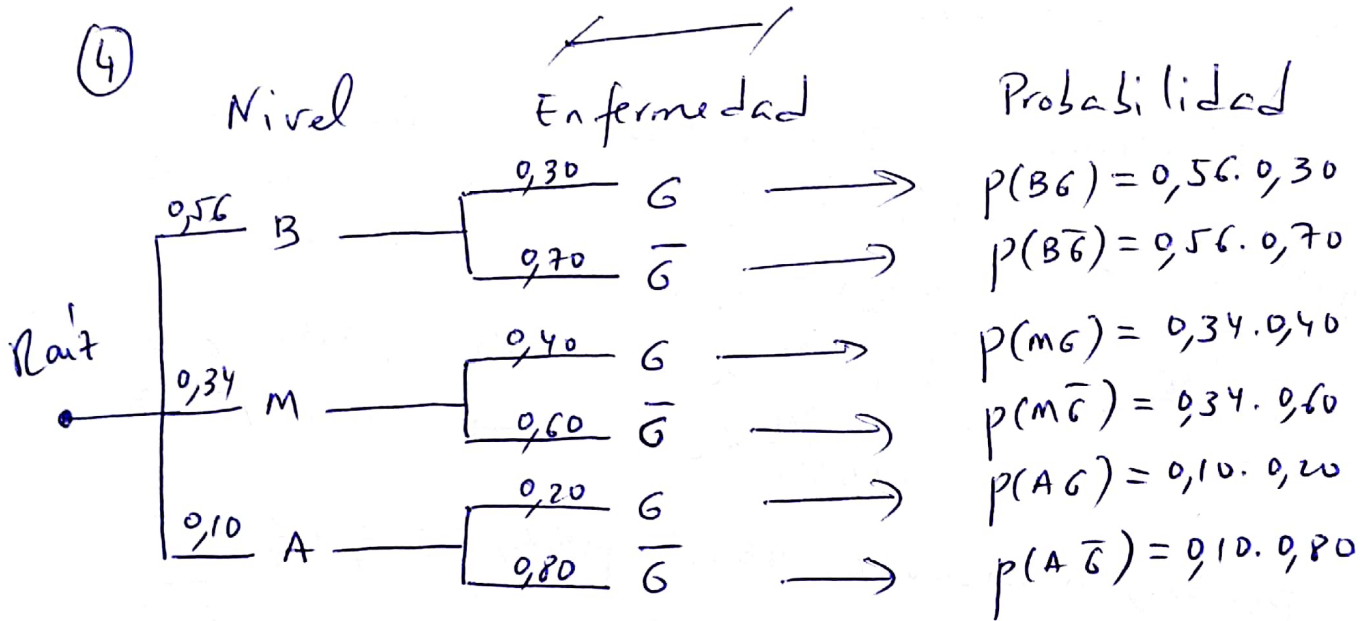


$$\begin{aligned}
 p(2 \text{ bolas mismo color}) &= p(B_1, B_2) + p(R_1, R_2) = \frac{5}{8} \cdot \frac{5}{8} + \frac{3}{8} \cdot \frac{3}{8} = \\
 &= \frac{25+9}{64} = \boxed{\frac{17}{32}} \approx \boxed{0,5313} \approx \boxed{53,13\%}
 \end{aligned}$$

③ ~~\*~~  $p(\text{Una bola de cada color}) = p(B_1, R_2) + p(R_1, B_2)$

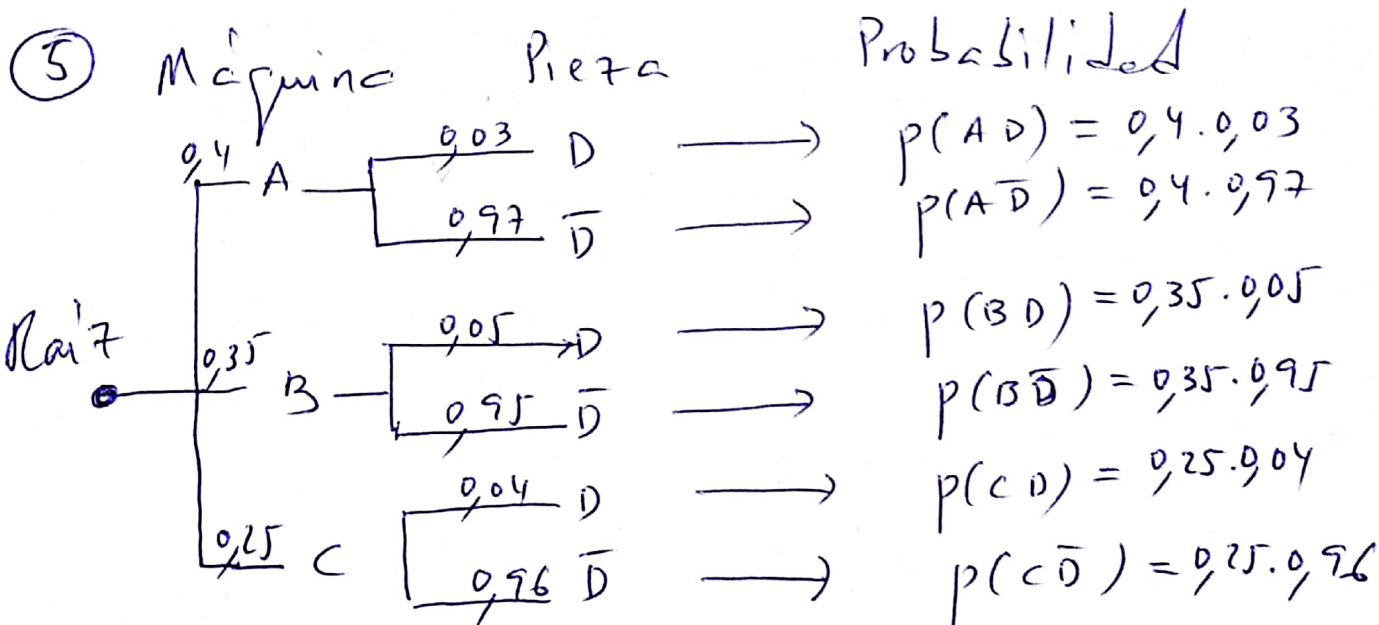
a)  $\frac{5}{8} \cdot \frac{3}{7} + \frac{3}{8} \cdot \frac{5}{7} = \frac{15}{28} \approx \boxed{53,57\%}$

b)  $\frac{5}{8} \cdot \frac{3}{8} + \frac{3}{8} \cdot \frac{5}{8} = \frac{15}{32} \approx \boxed{47,87\%}$



a)  $p(\text{No padezca gripe}) = p(B\bar{G}) + p(M\bar{G}) + p(A\bar{G}) =$   
 $= 0,56 \cdot 0,70 + 0,34 \cdot 0,60 + 0,10 \cdot 0,80 = 0,676 \approx \boxed{67,6\%}$

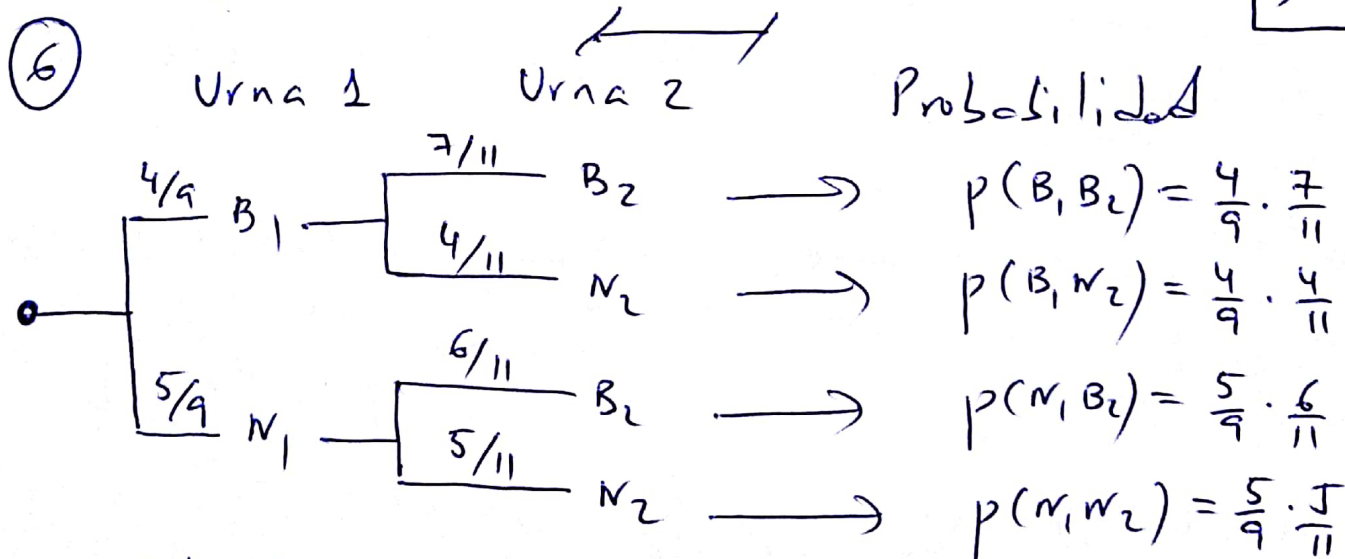
b)  $p(M/G) = \frac{p(MG)}{p(G)} = \frac{p(MG)}{p(BG) + p(MG) + p(AG)} =$   
 $= \frac{0,34 \cdot 0,40}{0,56 \cdot 0,30 + 0,34 \cdot 0,40 + 0,10 \cdot 0,20} = \frac{34}{81} \approx \boxed{42\%}$



a)  $p(A \cap D) = 0,4 \cdot 0,03 = 0,012 = \boxed{1,2\%}$

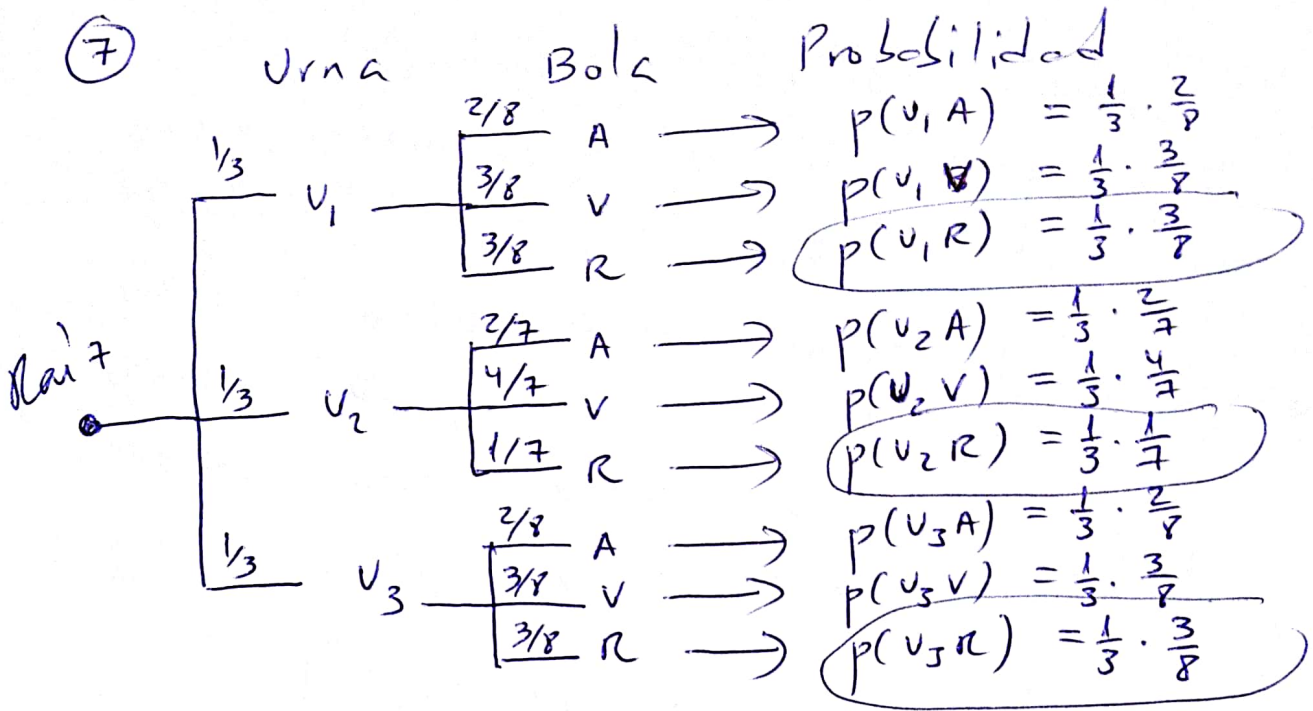
b)  $p(\bar{D} \cap B) + p(\bar{D} \cap C) = 0,35 \cdot 0,95 + 0,25 \cdot 0,96 = 0,5725 = \boxed{57,25\%}$

c)  $p(\text{Defectuosa}) = p(A \cap D) + p(B \cap D) + p(C \cap D) =$   
 $= 0,4 \cdot 0,03 + 0,35 \cdot 0,05 + 0,25 \cdot 0,04 = 0,0395 = \boxed{3,95\%}$



$p(\text{bola blanca urna 2}) = p(B_1 \cap B_2) + p(N_1 \cap B_2) =$   
 $= \frac{4}{9} \cdot \frac{7}{11} + \frac{5}{9} \cdot \frac{6}{11} = \frac{28+30}{99} = \frac{58}{99} \approx \boxed{58,59\%}$

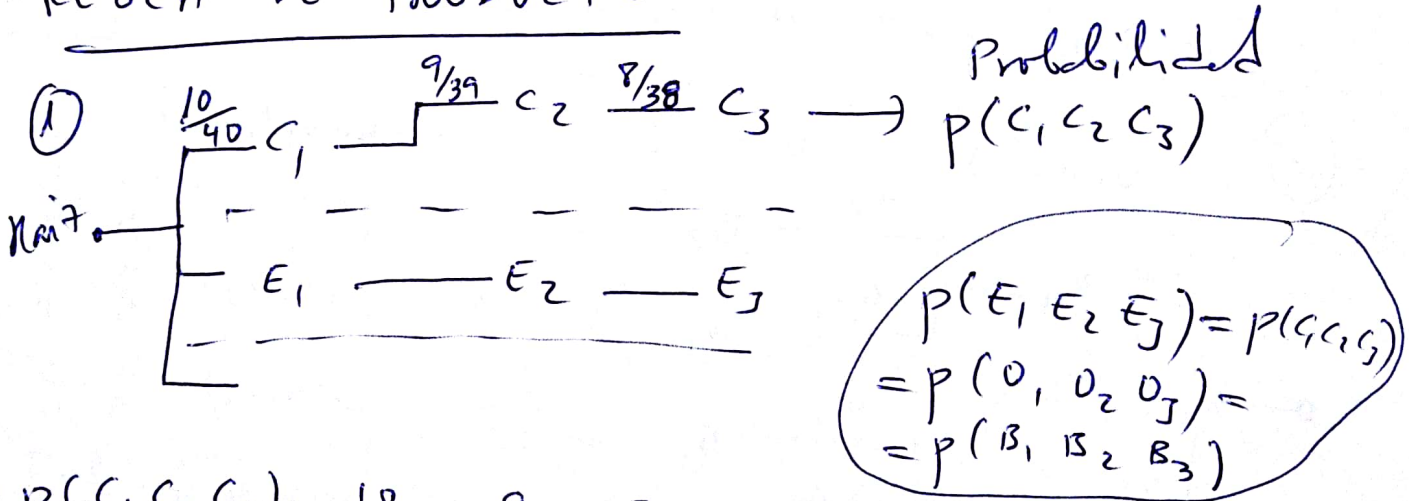
7



$$P(U_1/R) = \frac{P(U_1, R)}{P(R)} = \frac{P(U_1, R)}{P(U_1, R) + P(U_2, R) + P(U_3, R)} =$$

$$= \frac{\frac{1}{3} \cdot \frac{3}{8}}{\frac{1}{3} \cdot \frac{3}{8} + \frac{1}{3} \cdot \frac{1}{7} + \frac{1}{3} \cdot \frac{3}{8}} = \frac{21}{50} = \boxed{42\%}$$

REGLA DE PRODUCTO



a)  $P(C_1, C_2, C_3) = \frac{10}{40} \cdot \frac{9}{39} \cdot \frac{8}{38} = 0,0121 = 1,21\%$

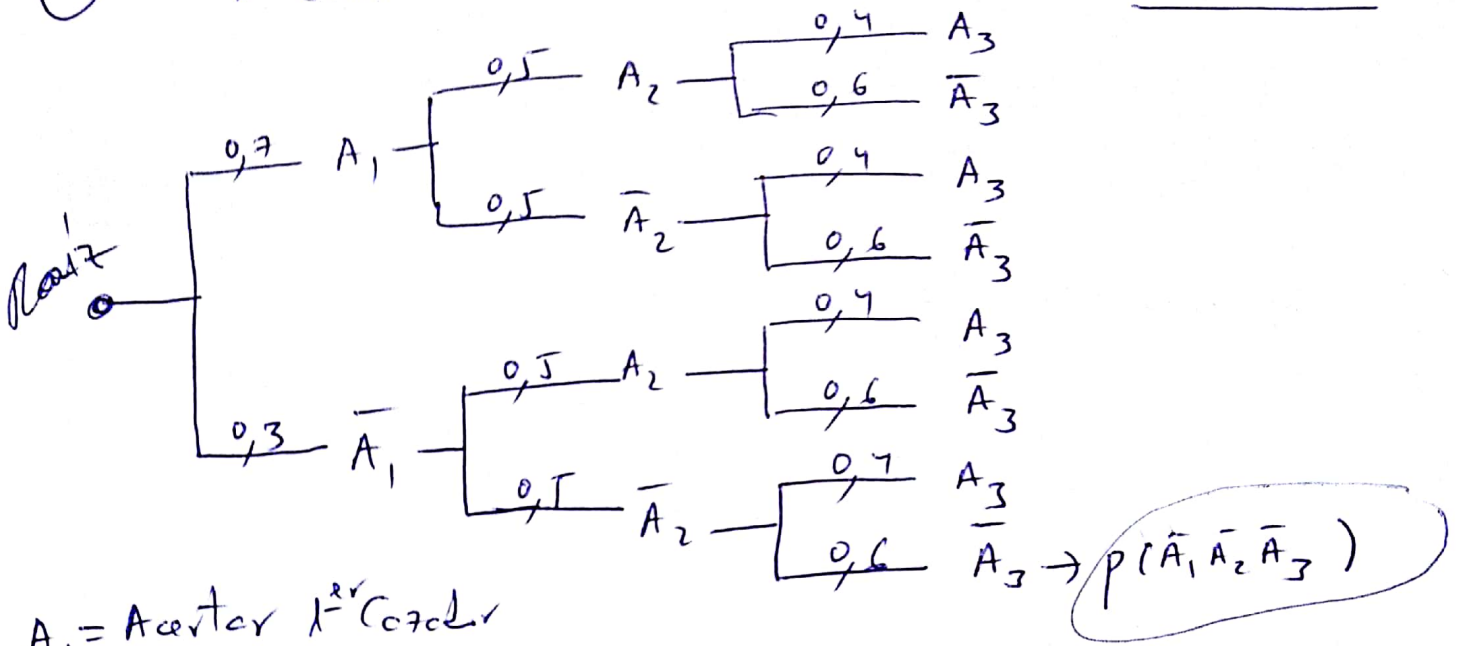
b)  $P(\text{tres misma polo}) = P(C_1, C_2, C_3) + P(E_1, E_2, E_3) + P(O_1, O_2, O_3) + P(B_1, B_2, B_3) = 4 \cdot 1,21\% = \boxed{4,84\%}$



2

1<sup>er</sup> cañador    2<sup>o</sup> cañador    3<sup>er</sup> cañador

Probabilidad



$A_1 =$  Acertar 1<sup>er</sup> cañador

$A_2 =$  " 2<sup>o</sup> "

$A_3 =$  " 3<sup>er</sup> "

$p(\text{no acertar en los disparos}) = p(\bar{A}_1 \bar{A}_2 \bar{A}_3) = 0,3 \cdot 0,5 \cdot 0,6 = 0,09$

$p(\text{Acertar}) = 1 - p(\text{no acertar}) = 1 - 0,09 = 0,91 = \boxed{91\%}$

TABLA DE CONTINGENCIA

3

	N	$\bar{N}$	Total
F	12	16	28
$\bar{F}$	18	54	72
Total	30	70	100

Suponemos un total de

Cubrimos la tabla de contingencia con los datos que nos dan

N = practican notación  
F = " fútbol

a)  $P(F^N/F) = \frac{\frac{12}{100}}{\frac{28}{100}} = \frac{3}{7} \approx \boxed{43\%}$

b)  $P(N/\bar{F}) = \frac{P(N\bar{F})}{P(\bar{F})} = \frac{\frac{18}{100}}{\frac{72}{100}} = \frac{1}{4} = \boxed{25\%}$

c)  $P(F^N/N \cup \bar{F}) = \frac{\frac{12}{100}}{\frac{46}{100}} = \frac{6}{23} \approx 26,1\%$

$N \cup \bar{F} = 100 - 54 = 46 \text{ casos}$

④

	A	$\bar{A}$	Total
B	10	18	28
$\bar{B}$	25	47	72
Total	35	65	100

$$\begin{aligned}
 a) \text{ p(al menos un periódico) } &= \\
 &= 1 - \text{p(ningún periódico)} = \\
 &= 1 - \text{p}(\bar{A}\bar{B}) = 1 - \frac{47}{100} = \frac{53}{100} = \boxed{53\%}
 \end{aligned}$$

$$b) \text{ p}(A\bar{B}) = \frac{25}{100} = \frac{1}{4} = \boxed{25\%}$$

$$c) \text{ p(ningún periódico) } = \text{p}(\bar{A}\bar{B}) = \frac{47}{100} = \boxed{47\%}$$

↔

⑤

	H	M	Total
R	12,6	13,75	26,35
$\bar{R}$	32,4	41,25	73,65
Total	45	55	100

R = Repite  
H = hombre  
M = Mujer

$$a) \text{ p}(HR) = \frac{12,6}{100} = 0,126 = \boxed{12,6\%}$$

$$b) \text{ p}(R/H) = \frac{\text{p}(RH)}{\text{p}(H)} = \frac{\frac{12,6}{100}}{\frac{45}{100}} = \frac{7}{25} = \boxed{28\%}$$

$$c) \text{ p}(\bar{R}/M) = \frac{\text{p}(\bar{R}M)}{\text{p}(M)} = \frac{\frac{41,25}{100}}{\frac{55}{100}} = \frac{3}{4} = \boxed{75\%}$$

$$d) \text{ p}(M\bar{R}) = \frac{41,25}{100} = \boxed{41,25\%}$$