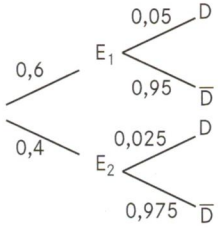
2. a) $p_1 = \dfrac{300 + 1\,000}{10\,000} = \dfrac{1\,300}{10\,000} = \mathbf{0{,}13}$.

b) $p_2 = \dfrac{8\,200}{10\,000} = \mathbf{0{,}82}$.

3. Nombre de pièces réparées : $1\,300 \times 0{,}9 = \mathbf{1\,170}$.

$p_3 = \dfrac{1\,170 + 8\,200}{10\,000} = \mathbf{0{,}937}$.

8 **1.** D'après l'énoncé, on a :
$P(E_1) = 0{,}6$; $P(D/E_1) = 0{,}05$; $P(E_2) = 0{,}4$
et $P(D/E_2) = 0{,}025$.



$P(E_1 \cap D) = P(D/E_1) \times P(E_1) = 0{,}05 \times 0{,}6 = \mathbf{0{,}03}$.
$P(E_2 \cap D) = P(D/E_2) \times P(E_2) = 0{,}025 \times 0{,}4 = \mathbf{0{,}01}$.
$P(D) = P(E_1 \cap D) + P(E_2 \cap D) = 0{,}03 + 0{,}01 = \mathbf{0{,}04}$.

2. $P(E_1/D) = \dfrac{P(E_1 \cap D)}{P(D)} = \dfrac{0{,}03}{0{,}04} = \mathbf{0{,}75}$.

$P(E_2/D) = \dfrac{P(E_2 \cap D)}{P(D)} = \dfrac{0{,}01}{0{,}04} = \mathbf{0{,}25}$.

10 **1. a)** $p(A) = \dfrac{1\,500}{4\,500} = \mathbf{\dfrac{1}{3}}$.

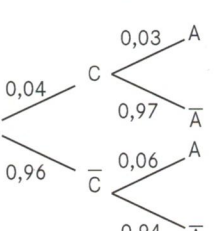
b) $p(B) = \dfrac{3\,000}{4\,500} = \mathbf{\dfrac{2}{3}}$.

c) $P(D) = \dfrac{1}{3} \times 0{,}02 + \dfrac{2}{3} \times 0{,}035 = \mathbf{0{,}03}$.

2. $P_D(A) = \mathbf{0{,}22}$.
$P_D(B) = \mathbf{0{,}78}$.

12 **1. a)** $P_{\overline{C}}(\overline{A}) = \mathbf{0{,}94}$, $P_C(A) = \mathbf{0{,}03}$, $P(C) = \mathbf{0{,}04}$.

b)



2. a) $P(C \cap A) = 0{,}04 \times 0{,}03 = \mathbf{0{,}0012}$.
b) $P(\overline{C} \cap A) = 0{,}96 \times 0{,}06 = \mathbf{0{,}0576}$.