4.3.19

⑥ 2J 3R 1V	⑥ 2J 2R 2V
U_1	2

Arbre sur page suivante

a) $P(R) = \frac{1}{2}\cdot\frac{1}{2}\cdot\frac{3}{7} + \frac{1}{2}\cdot\frac{1}{3}\cdot\frac{2}{7} + \frac{1}{2}\cdot\frac{1}{6}\cdot\frac{2}{7}$
$+ \frac{1}{2}\cdot\frac{1}{3}\cdot\frac{4}{7} + \frac{1}{2}\cdot\frac{1}{3}\cdot\frac{3}{7} + \frac{1}{2}\cdot\frac{1}{3}\cdot\frac{3}{7}$
$= \frac{3}{28} + \frac{1}{21} + \frac{1}{42} + \frac{2}{21} + \frac{1}{14} + \frac{1}{14} = \frac{5}{12}$

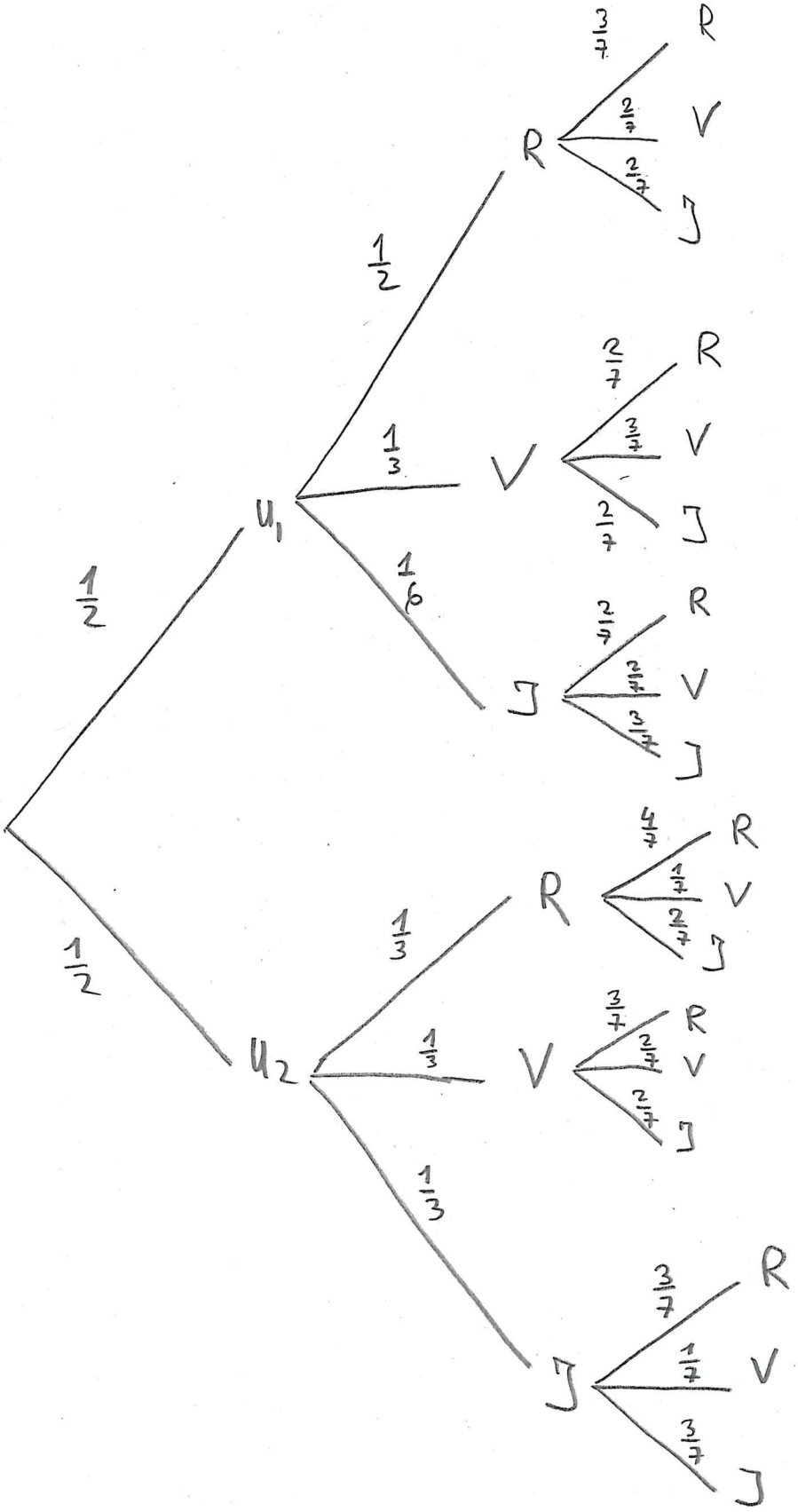
b) $P(R \mid \text{1ère } R) = \dfrac{\frac{1}{2}\cdot\frac{1}{2}\cdot\frac{3}{7} + \frac{1}{2}\cdot\frac{1}{3}\cdot\frac{4}{7}}{\frac{1}{2}\cdot\frac{1}{2} + \frac{1}{2}\cdot\frac{1}{3}} = \dfrac{\frac{3}{14} + \frac{4}{21}}{\frac{1}{2}+\frac{1}{3}} = \frac{17}{35}$

c) $P(R \mid U_1) = \dfrac{\frac{1}{2}\cdot\left(\frac{1}{2}\cdot\frac{3}{7} + \frac{1}{3}\cdot\frac{2}{7} + \frac{1}{6}\cdot\frac{2}{7}\right)}{\frac{1}{2}} = \frac{3}{14} + \frac{2}{21} + \frac{1}{21} = \frac{5}{14}$

d) $P(U_1 \mid \text{2ème } R) = \dfrac{\frac{1}{2}\cdot\frac{1}{2}\cdot\frac{3}{7} + \frac{1}{2}\cdot\frac{1}{3}\cdot\frac{2}{7} + \frac{1}{2}\cdot\frac{1}{6}\cdot\frac{2}{7}}{\frac{5}{12}}$

$= \dfrac{\frac{3}{28} + \frac{1}{21} + \frac{1}{42}}{\frac{5}{12}} = \dfrac{\frac{5}{28}}{\frac{5}{12}} = \frac{12}{28} = \frac{3}{7}$

4.3.19 (suite)


U1
U2
1/2
1/2
1/3
1/6
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1/3
R
V
J
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2/7
2/7
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