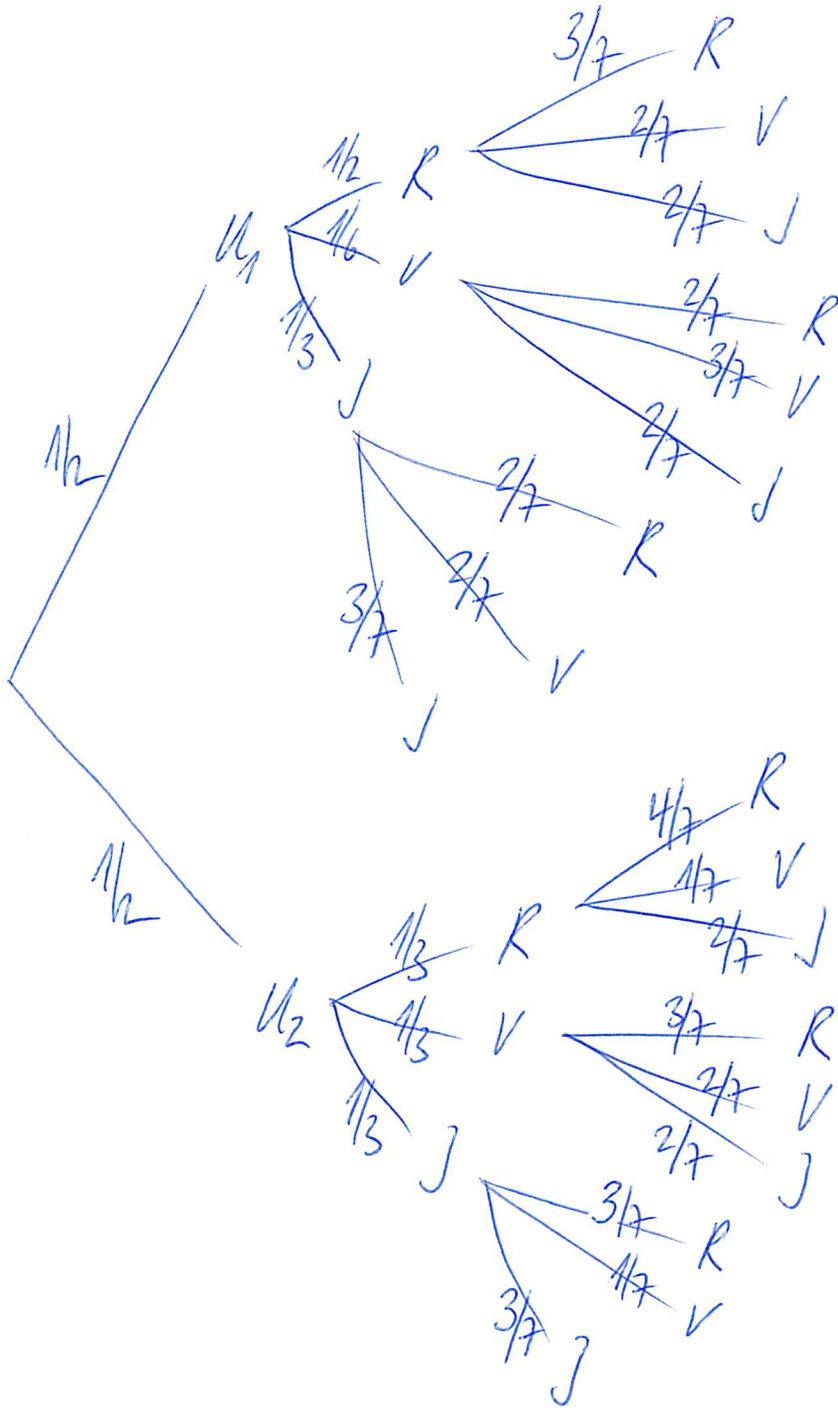


$U_1: 3R 1V 2J$

$U_2: 2R 2V 2J$



Arbre des possibilités.

$$\begin{aligned}
 a) \quad P(R) &= \frac{1}{2} \cdot \frac{1}{2} \cdot \frac{3}{7} + \frac{1}{2} \cdot \frac{1}{6} \cdot \frac{2}{7} + \frac{1}{2} \cdot \frac{1}{3} \cdot \frac{2}{7} \\
 &\quad + \frac{1}{2} \cdot \frac{1}{3} \cdot \frac{4}{7} + \frac{1}{2} \cdot \frac{1}{3} \cdot \frac{3}{7} + \frac{1}{2} \cdot \frac{1}{3} \cdot \frac{3}{7} \\
 &= \frac{5}{12}
 \end{aligned}$$

$$b) \quad P(R \text{ si } R) = \frac{P(R \text{ et } R)}{P(R \text{ et } \dots)}$$

$$= \frac{\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{3}{7} + \frac{1}{2} \cdot \frac{1}{3} \cdot \frac{4}{7}}{\frac{1}{2} \cdot \frac{1}{2} + \frac{1}{2} \cdot \frac{1}{3}}$$

$$= \frac{17}{35}$$

$$c) P(R|U_1) = \frac{1}{2} \cdot \frac{3}{7} + \frac{1}{6} \cdot \frac{2}{7} + \frac{1}{3} \cdot \frac{2}{7}$$

$$= \frac{5}{14}$$

$$d) P(U_1|R) = \frac{P(U_1 \text{ et } R)}{P(R)}$$

$$= \frac{\frac{1}{2} \cdot \frac{5}{14}}{\frac{5}{12}} = \frac{3}{7}$$