

Solution de série 02

Exercice 01

$$\Omega = \{ (i, j, k), i, j, k = \overline{1, 6} \}$$

$$\text{card } \Omega = 6^3 = 216$$

$$e/ \text{ La loi de } X; \quad X = \{ 1, 2, 3 \}$$

$$P(X=1) = \frac{6}{216}$$

$$\begin{aligned} P(X=3) &= \frac{A_6^3}{216} = \frac{6!}{(6-3)! \cdot 216} \\ &= \frac{\frac{6!}{3!}}{216} = \frac{6 \times 5 \times 4 \times 3!}{3! \cdot 216} \\ &= \frac{6 \times 5 \times 4}{216} = \frac{120}{216} \end{aligned}$$

$$P(X=2) = 1 - [P(X=1) + P(X=3)]$$

$$= 1 - \left(\frac{6}{216} + \frac{120}{216} \right)$$

$$= 1 - \left(\frac{126}{216} \right) = \frac{216 - 126}{216}$$

$$= \frac{90}{216}$$