

$$\textcircled{1} -\frac{h^2}{2} - h + 2 > 0$$

$$-\frac{h^2}{2} - h + 2 = 0$$

$$\Delta^2 - 4ac = 1 + 4 \times 0,5 \times 2 = 5 =$$

$$x_1 = 1 + \sqrt{5} \approx 3,23 \quad x_2 = 1 - \sqrt{5} \approx -1,23$$

Positif entre les racines

$$\Rightarrow S_1 =]1 - \sqrt{5}; 1 + \sqrt{5}[$$

$$\textcircled{2} -\frac{h^2}{2} - h + 2 < 2 \Leftrightarrow -\frac{h^2}{2} - h + 0 < 0$$

$$b^2 - 4ac = b^2 = 1$$

$$S_2 =]0; 2[$$

$$x_1 = 0$$

$$x_2 = 2$$

$$\textcircled{3} S_3 = h > 0$$

$$S_1 \cap S_2 \cap S_3 = h \in]0; 2[$$

Donc $n = 2$