

n. 74 p. 33

a) $k = ?$ se $x \in [\pi, \frac{3\pi}{2}]$

$k = ?$

$$\cos x = \frac{2-k}{k}$$

$$-1 \leq \cos x \leq 1$$

$$-1 \leq \frac{2-k}{k} \leq 1$$

$$\begin{cases} \frac{2-k}{k} \geq -1 \\ \frac{2-k}{k} \leq 1 \end{cases}$$

$$\begin{cases} \frac{2-k+k}{k} \geq 0 \\ \frac{2-k-k}{k} \leq 0 \end{cases}$$

$$\begin{cases} \frac{2}{k} \geq 0 \\ \frac{2-2k}{k} \leq 0 \end{cases}$$

$N \geq 0$
sempre

$D > 0$

$N \geq 0$

$$2-2k \geq 0$$

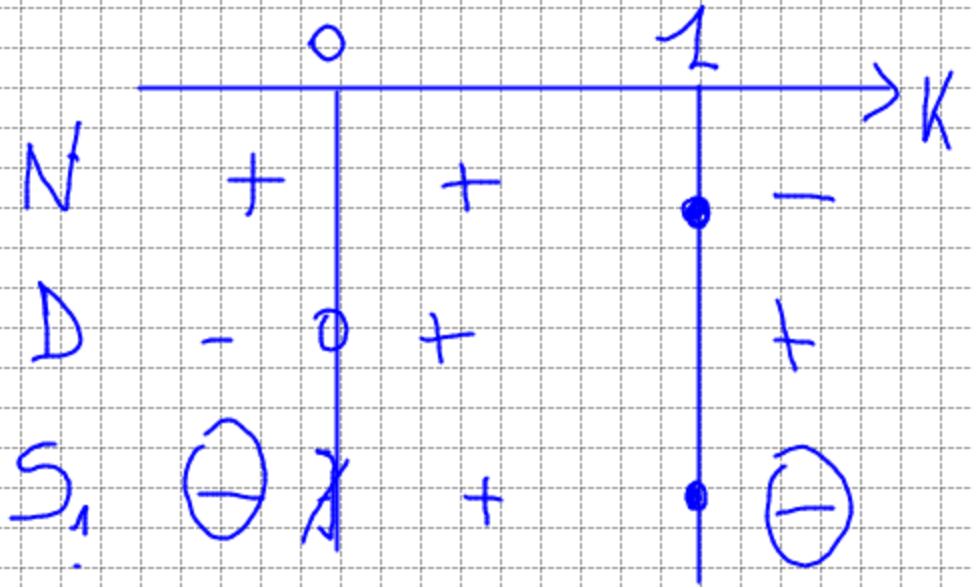
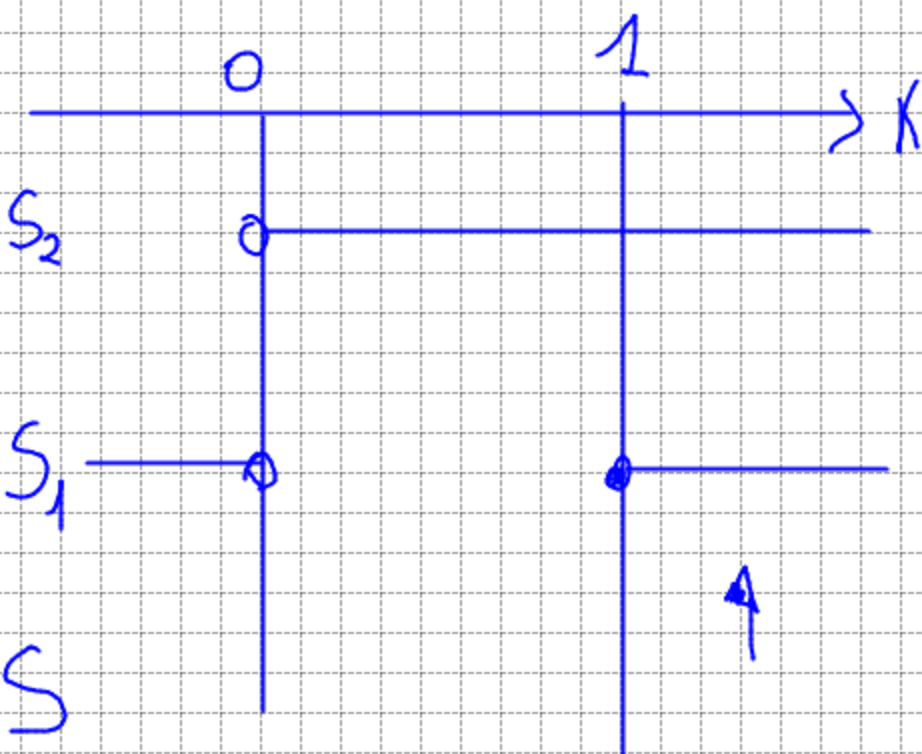
$$2k \leq 2$$

$$k \leq 1$$

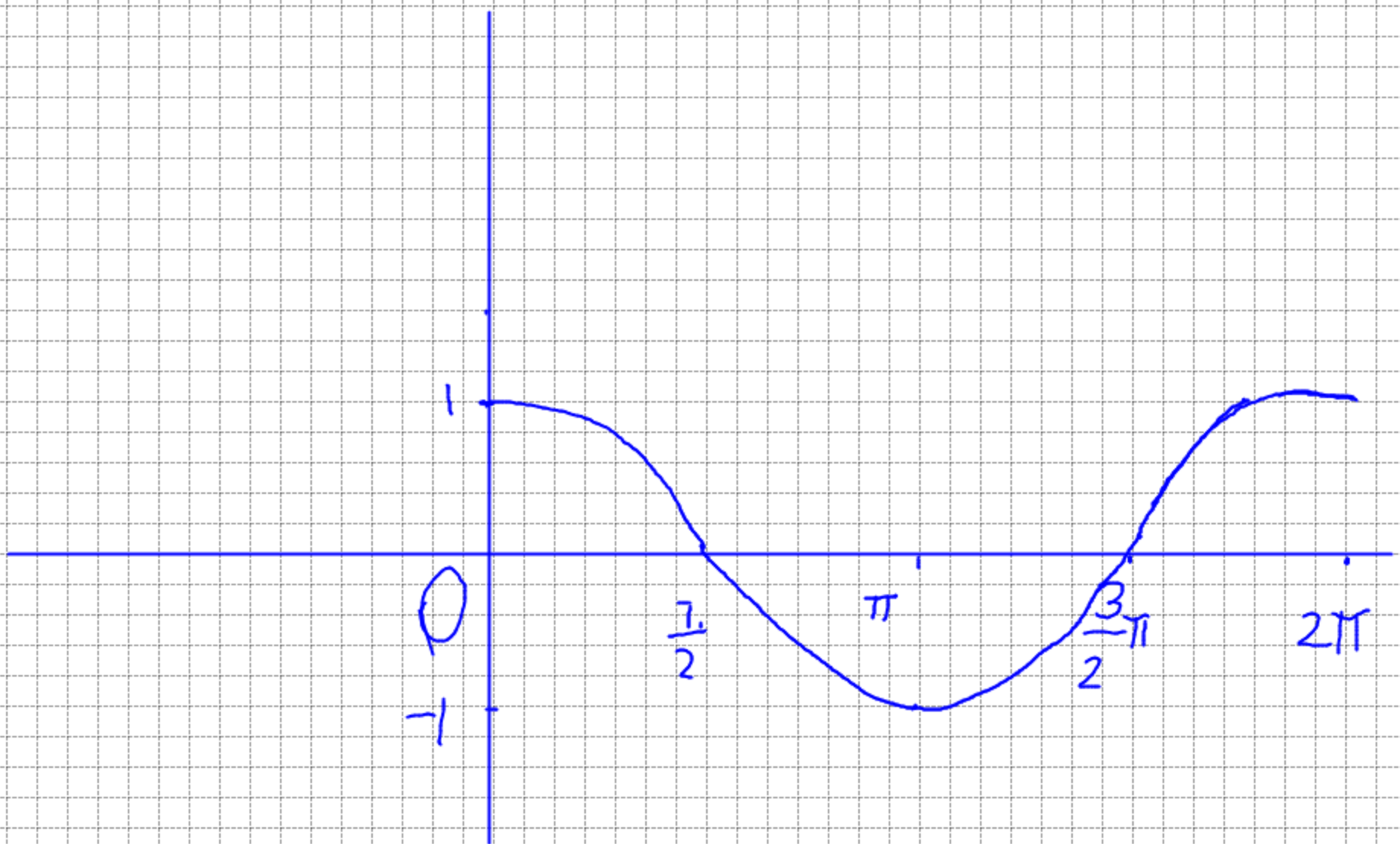
$k > 0$

$$S_2: k > 0$$

$$S_1: k < 0 \vee k \geq 1$$



$$S: [1; +\infty)$$



$$\cos \pi \leq \frac{2-k}{k} \leq \cos \frac{3\pi}{2}$$

$$-1 \leq \frac{2-k}{k} \leq 0$$

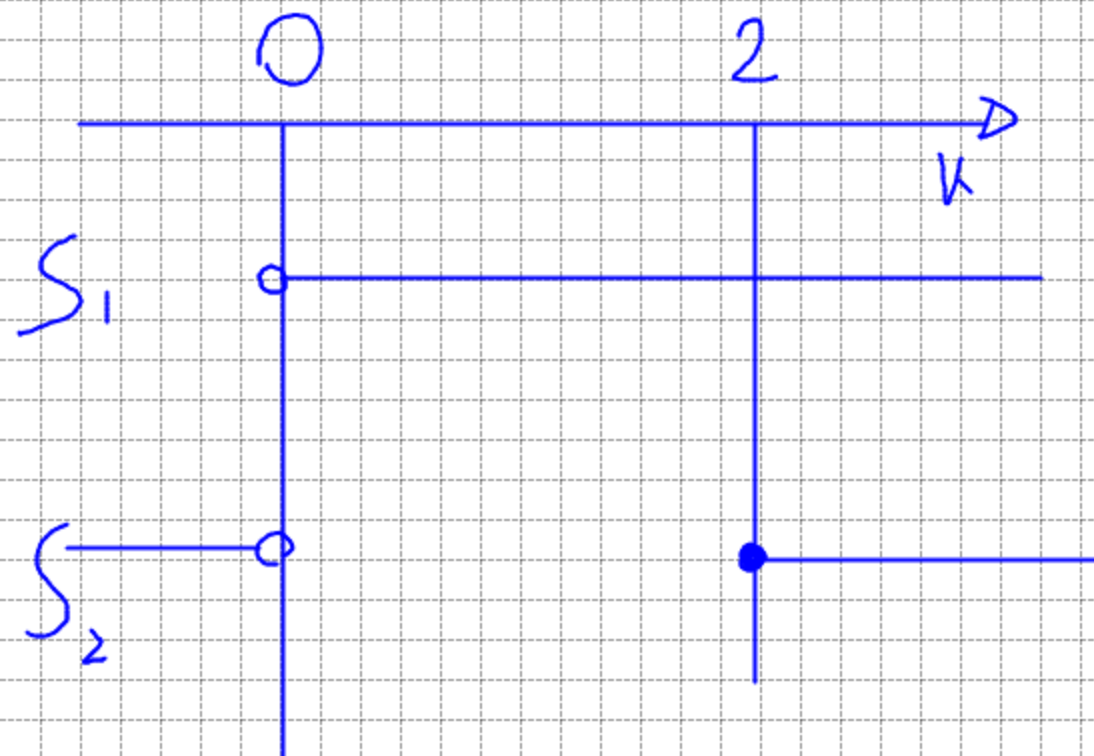
$$\begin{cases} \frac{2-k}{k} \geq -1 \\ \frac{2-k}{k} \leq 0 \end{cases}$$

$$\begin{cases} \frac{2-k}{k} \geq 0 \\ \frac{2-k}{k} \leq 0 \end{cases}$$

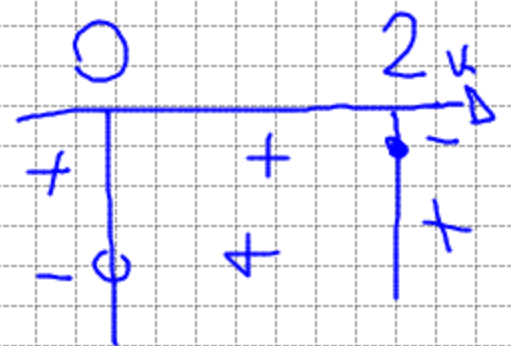
$$\begin{cases} \frac{2}{k} \geq 0 \\ \frac{2-k}{k} \leq 0 \end{cases}$$

$$S_1 \quad D: k > 0$$

$$S_2 \quad N: \begin{aligned} 2-k &\geq 0 \\ k &\leq 2 \end{aligned}$$



$$D \quad k > 0$$



$$k < 0 \vee$$

$$k \geq 2$$

$$/ \quad S: k \geq 2$$

$$\log_a b - \log_a c = \log_a \frac{b}{c}$$

$$x_1 = \log_a b$$

$$x_2 = \log_a c$$

$$a^{x_1} = b$$

$$a^{x_2} = c$$

$$\frac{a^{x_1}}{a^{x_2}} = \frac{b}{c} \longrightarrow a^{x_1 - x_2} = \frac{b}{c}$$

$$y = \frac{1}{2} \sin\left(x + \frac{\pi}{2}\right)$$

$$\vec{v} \left(-\frac{\pi}{2}; 0\right)$$

