

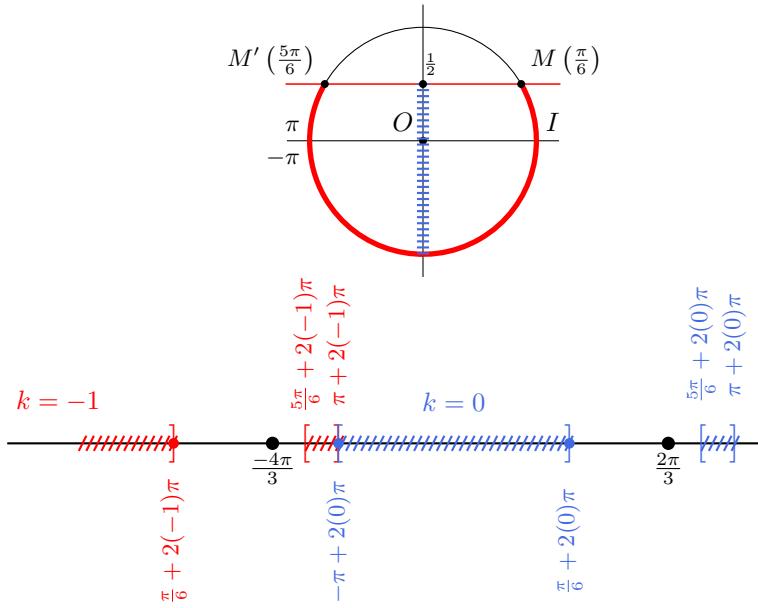


Résoudre:  $x \in [-\pi, \pi]$      $\sin(x - \frac{\pi}{3}) \leq \frac{1}{2}$

On pose  $t = x - \frac{\pi}{3}$  càd  $x = t + \frac{\pi}{3}$

et puisque  $x \in [-\pi, \pi]$  càd  $x - \frac{\pi}{3} \in [-\frac{4\pi}{3}, \frac{2\pi}{3}]$

Ainsi  $t \in [-\frac{4\pi}{3}, \frac{2\pi}{3}]$      $\sin t \leq \frac{1}{2}$



Alors  $t \in [-\frac{7\pi}{6}, \frac{\pi}{6}]$

càd  $x = t + \frac{\pi}{3} \in [-\frac{5\pi}{6}, \frac{\pi}{2}]$

Donc  $S = [-\frac{5\pi}{6}, \frac{\pi}{2}]$