

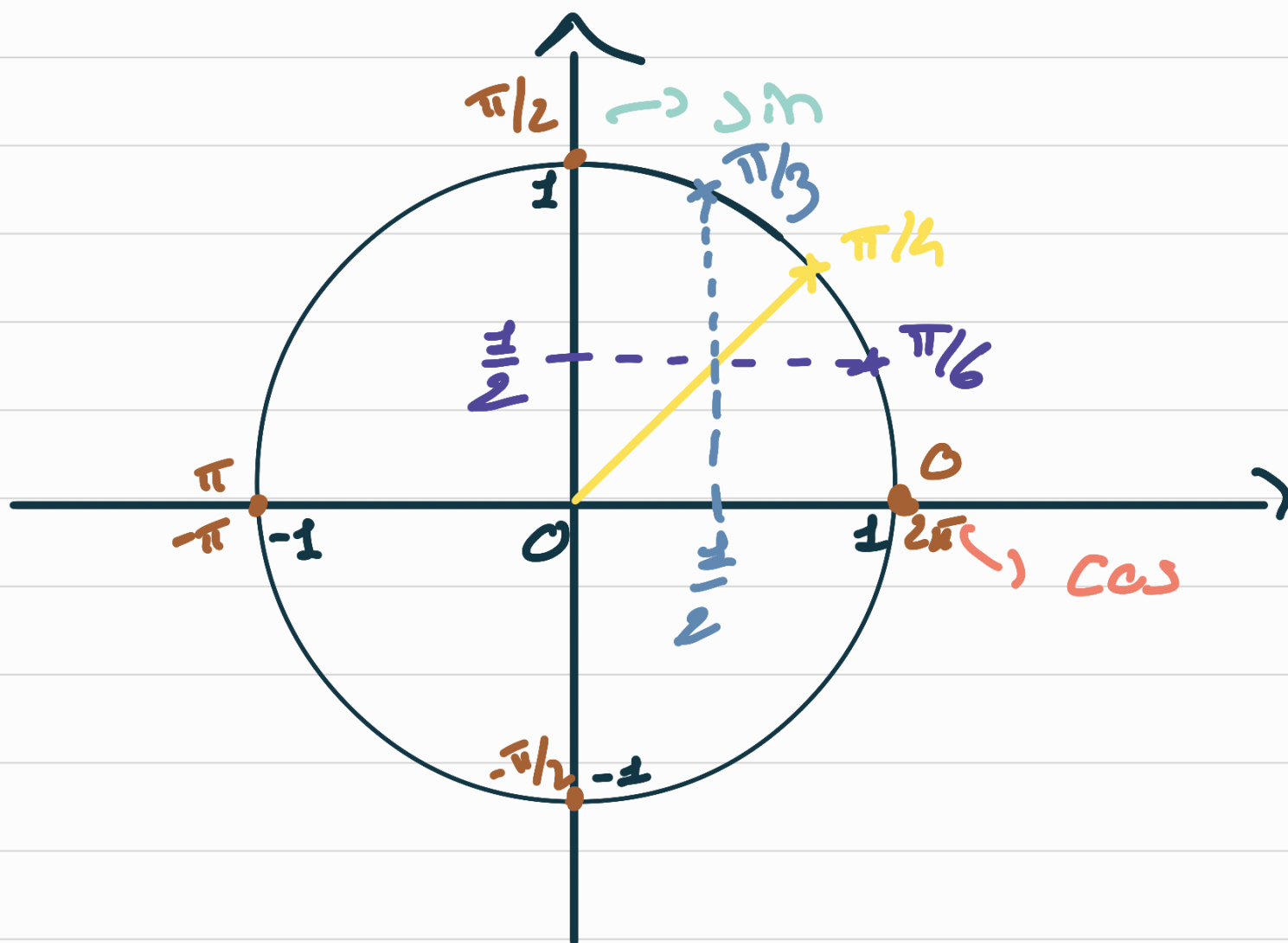
Fonctions Trigonométriques

- $\cos(x)$ définie sur $\mathbb{R}$.
 - $\sin(x)$ définie sur $\mathbb{R}$.
-

- $-1 \leq \cos(x) \leq 1$
 - $-1 \leq \sin(x) \leq 1$
-

- $\cos^2(x) + \sin^2(x) = 1.$

x	$0/2\pi$	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\pi/-\pi$	$-\frac{\pi}{2}$
$\cos x$	1	$\sqrt{3}/2$	$\frac{\sqrt{2}}{2}$	$1/2$	0	-1	0
$\sin x$	0	$1/2$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	0	-1



3. Calculer le cosinus et le sinus des angles θ suivants:

a. $\theta = -\frac{\pi}{6}$.

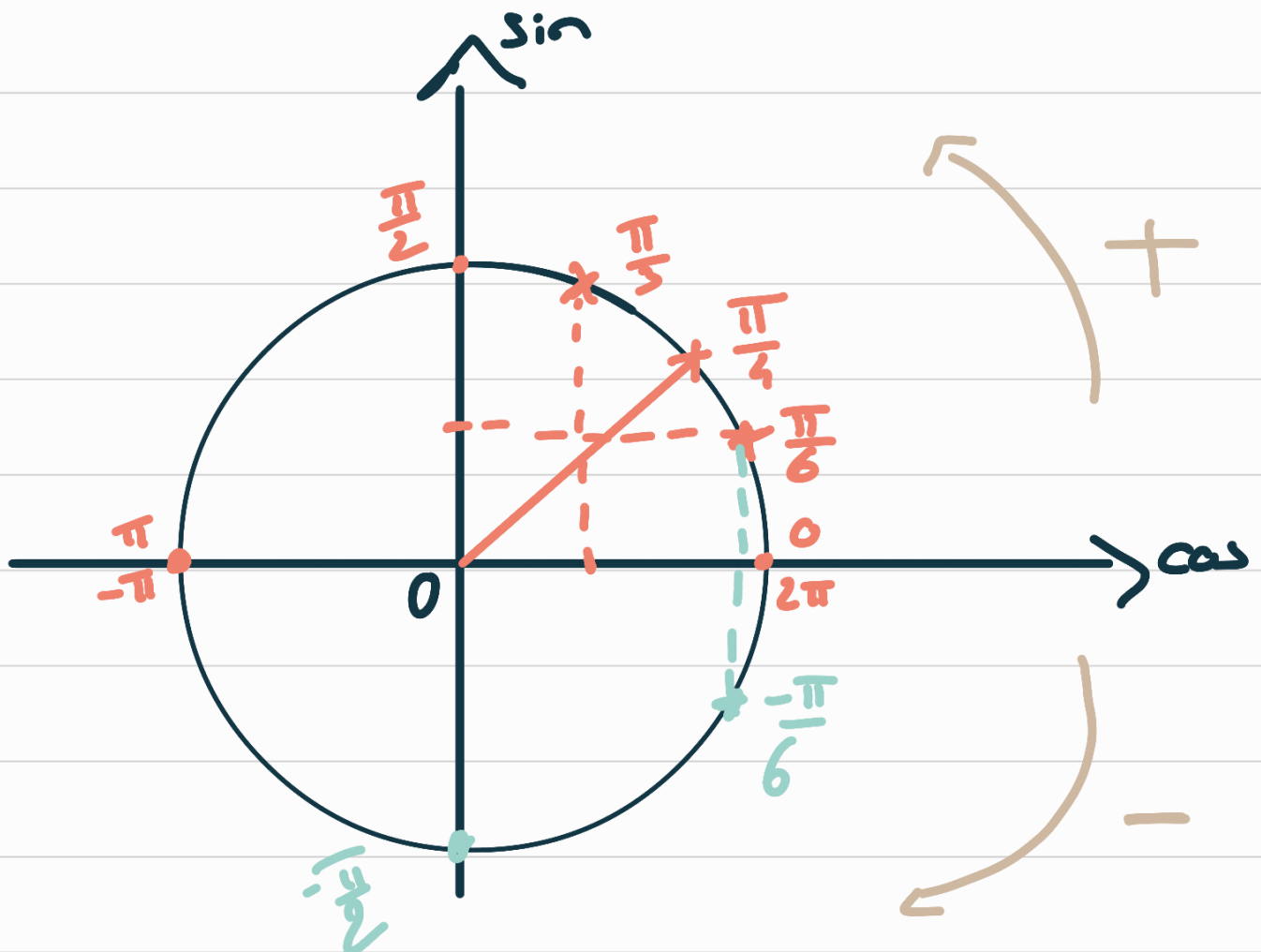
b. $\theta = \frac{\pi}{2}$.

c. $\theta = -\pi$.

d. $\theta = \frac{4\pi}{3}$.

e. $\theta = \frac{5\pi}{6}$.

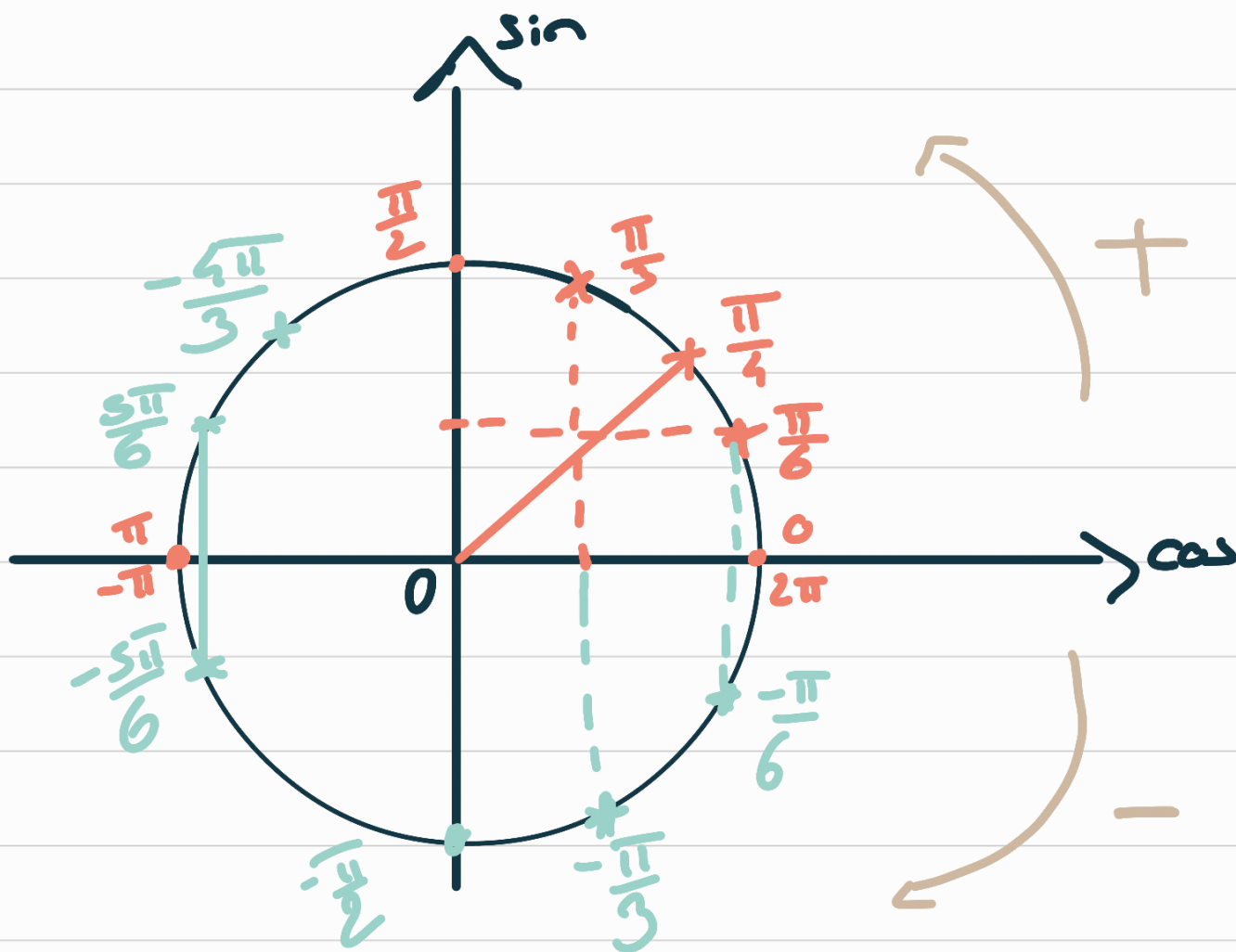
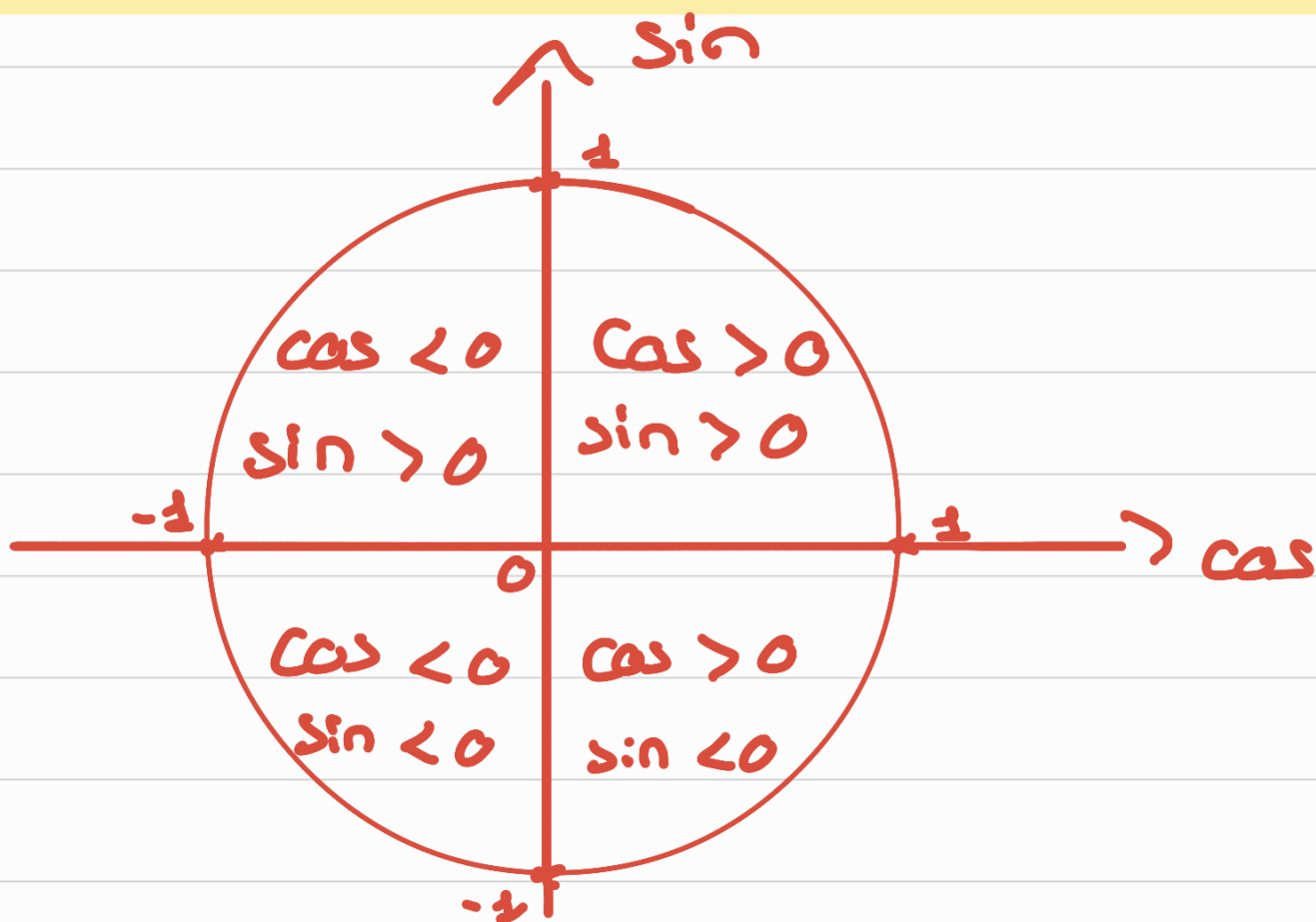
f. $\theta = -\frac{5\pi}{6}$.



$$\textcircled{a} \begin{cases} \cos\left(-\frac{\pi}{6}\right) = \frac{\sqrt{3}}{2} \\ \sin\left(-\frac{\pi}{6}\right) = -\frac{1}{2} \end{cases}$$

$$\textcircled{b} \begin{cases} \cos\left(-\frac{\pi}{2}\right) = 0 \\ \sin\left(-\frac{\pi}{2}\right) = -1 \end{cases}$$

$$\textcircled{c} \begin{cases} \cos(-\pi) = -1 \\ \sin(-\pi) = 0 \end{cases}$$



$$d) \cos\left(-\frac{4\pi}{3}\right) = -\frac{1}{2}$$

$$\sin\left(-\frac{4\pi}{3}\right) = \frac{\sqrt{3}}{2}.$$

$$e) \cos\left(\frac{5\pi}{6}\right) = -\frac{\sqrt{3}}{2}$$

$$\sin\left(\frac{5\pi}{6}\right) = \frac{1}{2}$$

$$f) \cos\left(-\frac{5\pi}{6}\right) = -\frac{\sqrt{3}}{2}$$

$$\sin\left(-\frac{5\pi}{6}\right) = -\frac{1}{2}.$$

π

$\frac{\pi}{2}$

$\frac{3\pi}{4}$

$-\frac{\pi}{4}$

$\frac{3\pi}{2}$

$\frac{\pi}{3}$

$-\frac{5\pi}{6}$

$-\frac{4\pi}{3}$

$\frac{9\pi}{4}$

$-\frac{14\pi}{3}$

$-\frac{2\pi}{3}$

x	$0/2\pi$	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\pi/-\pi$	$-\frac{\pi}{2}$
$\cos x$	1	$\sqrt{3}/2$	$\frac{\sqrt{2}}{2}$	$1/2$	0	-1	0
$\sin x$	0	$1/2$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	0	-1

