

Notes

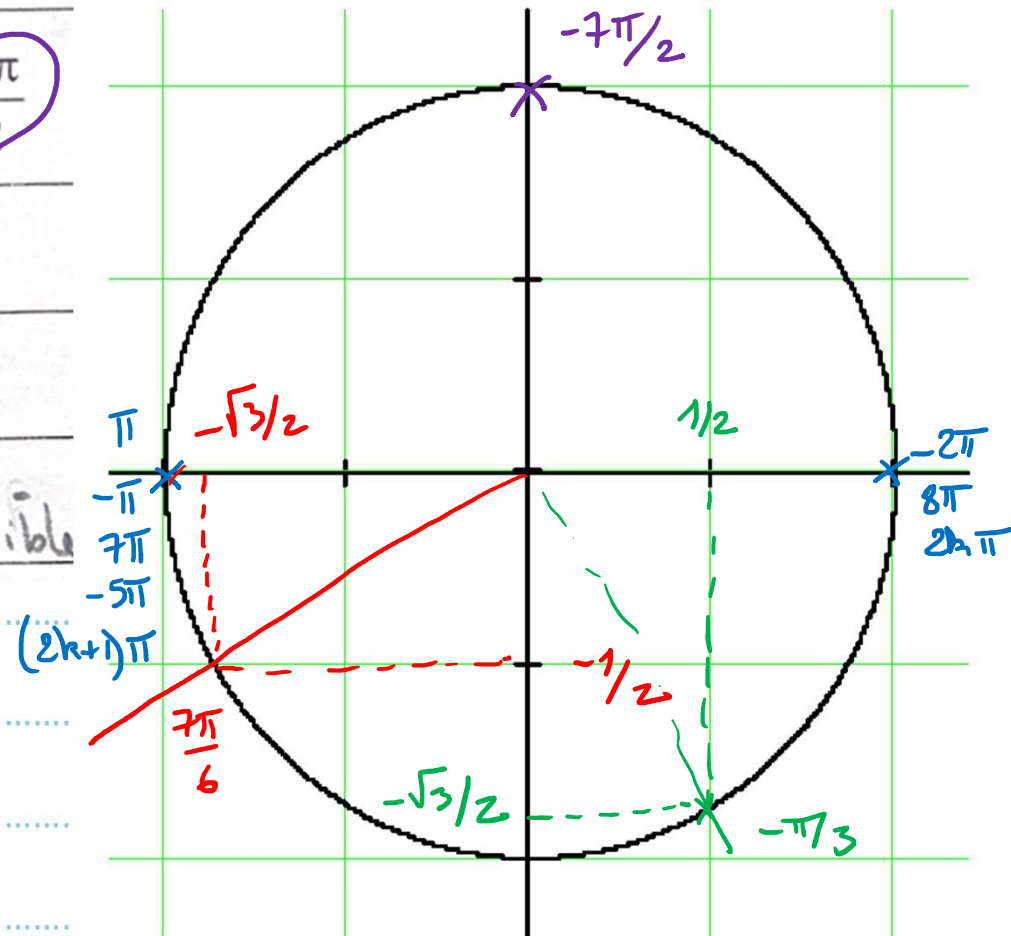
Corrigé DM2

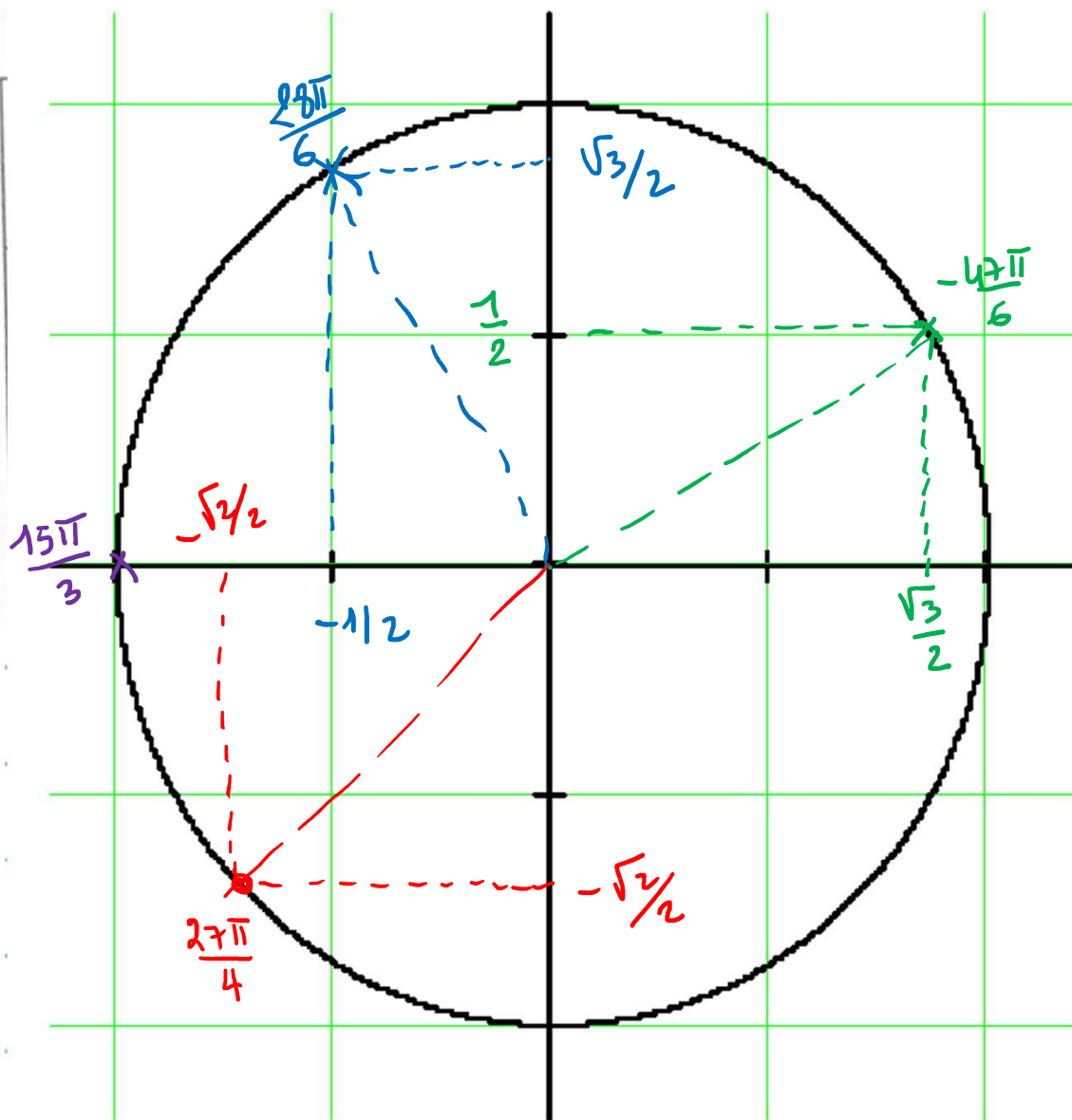
Exercice 1 Compléter le tableau suivant : (k est un entier relatif : $k \in \mathbb{Z}$)

θ	$-2\pi ;$ $8\pi ;$ $2k\pi$	$\pi ; -\pi ;$ $7\pi ; -5\pi$ $(2k+1)\pi$	$\frac{7\pi}{6}$	$-\frac{\pi}{3}$	$-\frac{7\pi}{2}$
$\sin \theta$	0	0	$-\frac{1}{2}$	$-\frac{\sqrt{3}}{2}$	1
$\cos \theta$	1	-1	$-\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	0
$\tan \theta$	0	0	$\frac{\sqrt{3}}{3}$	$-\sqrt{3}$	imp- ossible

$$\frac{7\pi}{6} = \underbrace{\frac{6\pi}{6}}_{\pi} + \frac{\pi}{6}$$

$$-\frac{7\pi}{2} = \underbrace{-\frac{8\pi}{2}}_{-4\pi = \text{tour}} + \frac{\pi}{2}$$





entier relatif : $k \in \mathbb{Z}$)

$\frac{27\pi}{4}$	$-\frac{47\pi}{6}$	$\frac{15\pi}{3}$	$\frac{28\pi}{6}$	$k\pi$
$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	$\frac{\sqrt{3}}{2}$	0
$-\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	-1	$-1/2$	± 1
-1	$\frac{\sqrt{3}}{3}$	0	$-\sqrt{3}$	0

$$\frac{27\pi}{4} = \frac{24\pi}{4} + \frac{3\pi}{4}$$

$= 6\pi = 3 \text{ tours de cercle}$

$$-\frac{47\pi}{6} = -\frac{48\pi}{6} + \frac{\pi}{6}$$

$= -8\pi = 4 \text{ tours de cercle}$

$(-1)^k$

$$\frac{28\pi}{6} = \frac{12\pi}{3} + \frac{16\pi}{6}$$

$$= \frac{12\pi}{3} + \frac{8\pi}{3}$$

$4\pi = 2 \text{ tours}$