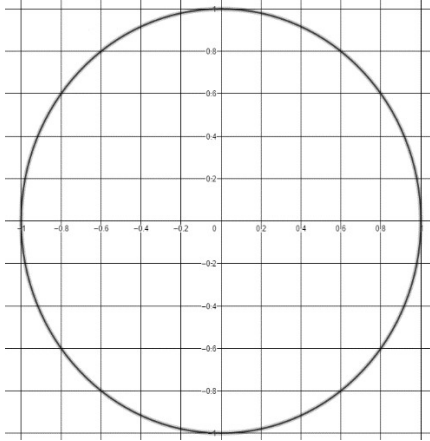


**Exercise 1**

Calc. : ✘

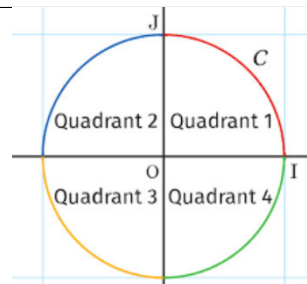
4 marks Find the value of  $\cos\left(\frac{7\pi}{4}\right)$  using the unit circle below.



**Exercise 2**

Calc. : ✘

4 marks True or false? Justify your answer.  
If  $\sin(\alpha) > 0$  and  $\alpha$  is in Quadrant 2,  $\tan(\alpha) > 0$ .



Exercise 3

Calc. : ✗

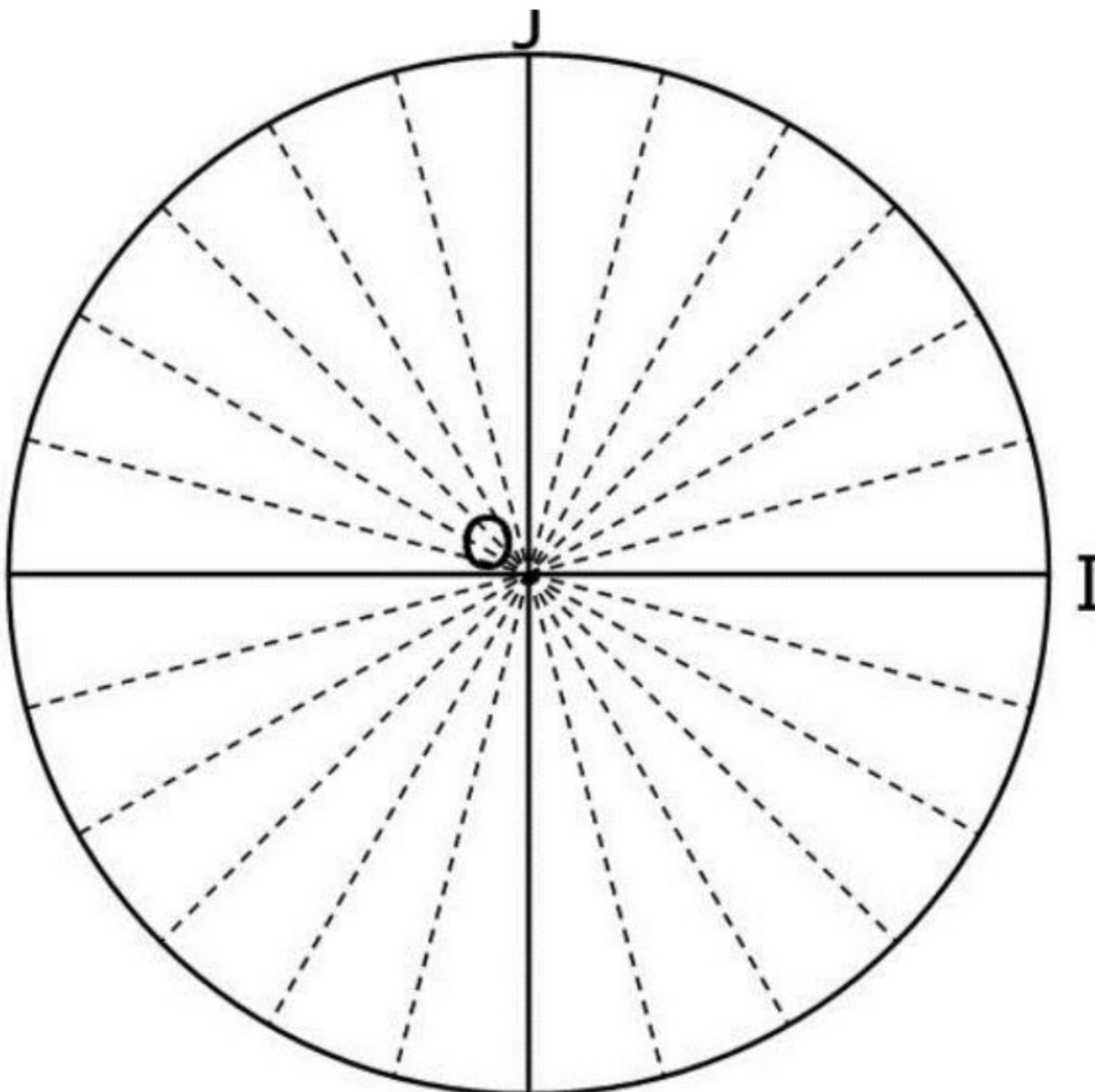
3. Place on the unit circle the following angles and for each one of them give the sin and the cos: (8 points)

a.  $\frac{5\pi}{4}$

c.  $\frac{\pi}{3}$

b.  $\frac{11\pi}{6}$

d.  $\pi$



**Exercise 4**

Calc. : ✓

8 marks	<p>a) Convertir les mesures des trois angles des degrés en radians (donner des valeurs exactes).</p> $\alpha = 45^\circ \qquad \qquad \qquad \beta = 15^\circ \qquad \qquad \qquad \gamma = 275^\circ$ <p>b) Convertir les mesures des trois angles des radians en degrés (donner des valeurs exactes, sauf pour l'angle <math>\gamma</math> que vous arrondirez au centième).</p> $\alpha = \frac{2}{3}\pi \text{ rad} \qquad \qquad \qquad \beta = \frac{7}{12}\pi \text{ rad} \qquad \qquad \qquad \gamma = 3 \text{ rad}$
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**Exercise 5**

Calc. : ✓

Drücken Sie die folgenden Winkelmaße in <b>Bogenmaß</b> aus:	
1 mark	1. $90^\circ$
1 mark	2. $235^\circ$
Drücken Sie die folgenden Winkelmaße im <b>Gradmaß</b> aus:	
1 mark	3. $\frac{\pi}{3}$ rad
1 mark	4. $\frac{21\pi}{4}$ rad

**Exercise 6**

Calc. : ✗

2 marks	<p>1. Indiquer sur le graphique ci-contre les angles correspondant à :</p> <p>(a) <math>30^\circ</math>                      (c) <math>\frac{\pi}{4}</math> rad</p> <p>(b) <math>90^\circ</math>                        (d) <math>\frac{\pi}{3}</math> rad</p>									
4 marks	<p>2. Remplir le tableau ci-dessous. Expliquez le raisonnement menant aux résultats.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">Angle <math>\alpha</math></td> <td style="padding: 5px;"><math>30^\circ</math></td> <td style="padding: 5px;"><math>\frac{\pi}{3}</math> rad</td> </tr> <tr> <td style="padding: 5px;"><math>\sin \alpha</math></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"><math>\cos \alpha</math></td> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> </table>		Angle $\alpha$	$30^\circ$	$\frac{\pi}{3}$ rad	$\sin \alpha$			$\cos \alpha$	
Angle $\alpha$	$30^\circ$	$\frac{\pi}{3}$ rad								
$\sin \alpha$										
$\cos \alpha$										