

# TRIGONOMÉTRIE

## SÉRIE 5

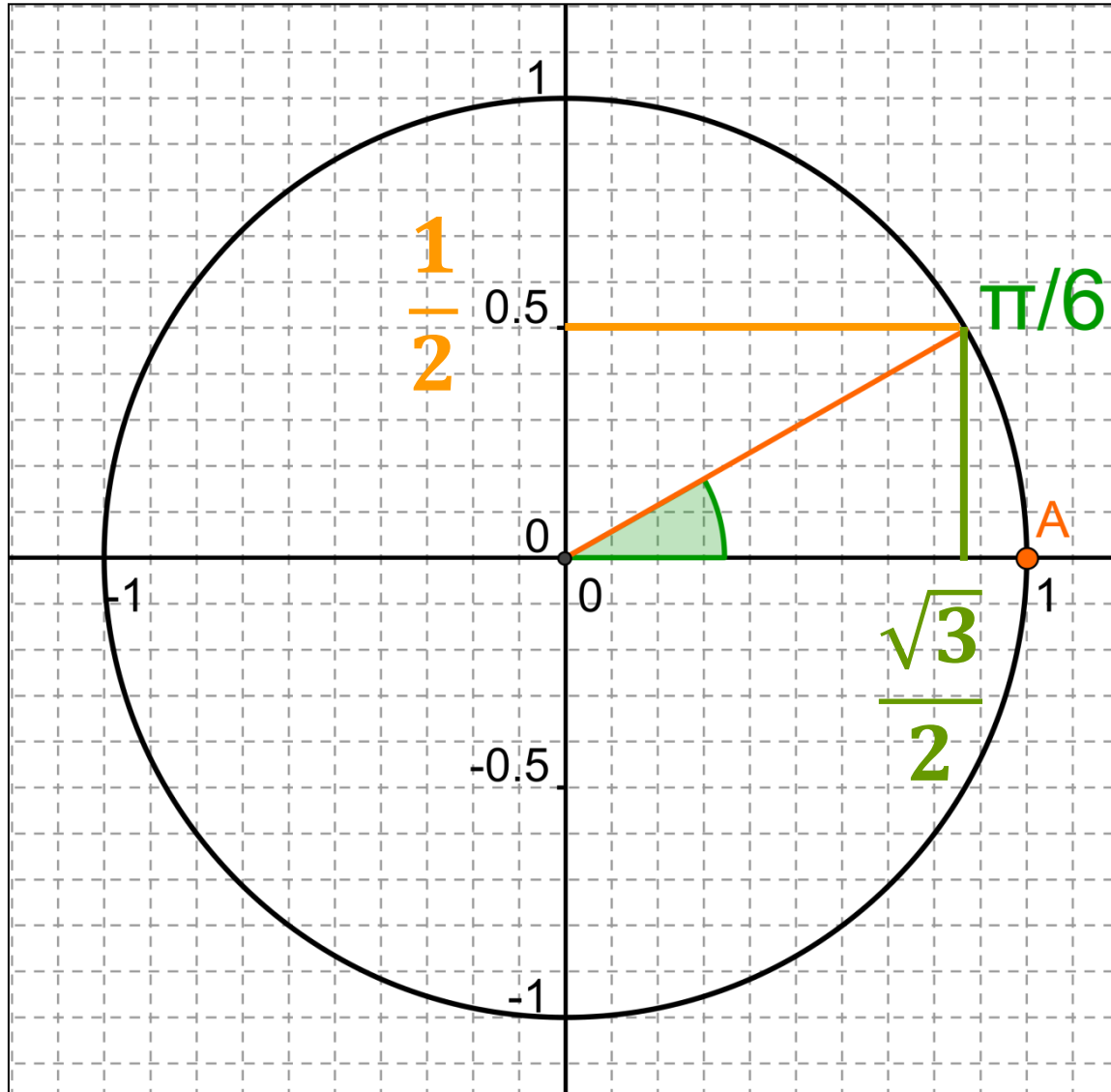
Calcul mental et automatismes – IREM de Clermont-Ferrand

Donner les valeurs  
exactes des sinus et cosinus  
des réels suivants :

Nº0

$$\frac{\pi}{6}$$

# Nº0



$$\cos \frac{\pi}{6} = \frac{\sqrt{3}}{2}$$
$$\sin \frac{\pi}{6} = \frac{1}{2}$$

Nº1

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

Nº2

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

Nº3

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

Nº4

*7\pi*



Nº5

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

Nº6

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

Nº7

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

Nº8

$$\frac{7\pi}{6}$$

Nº9

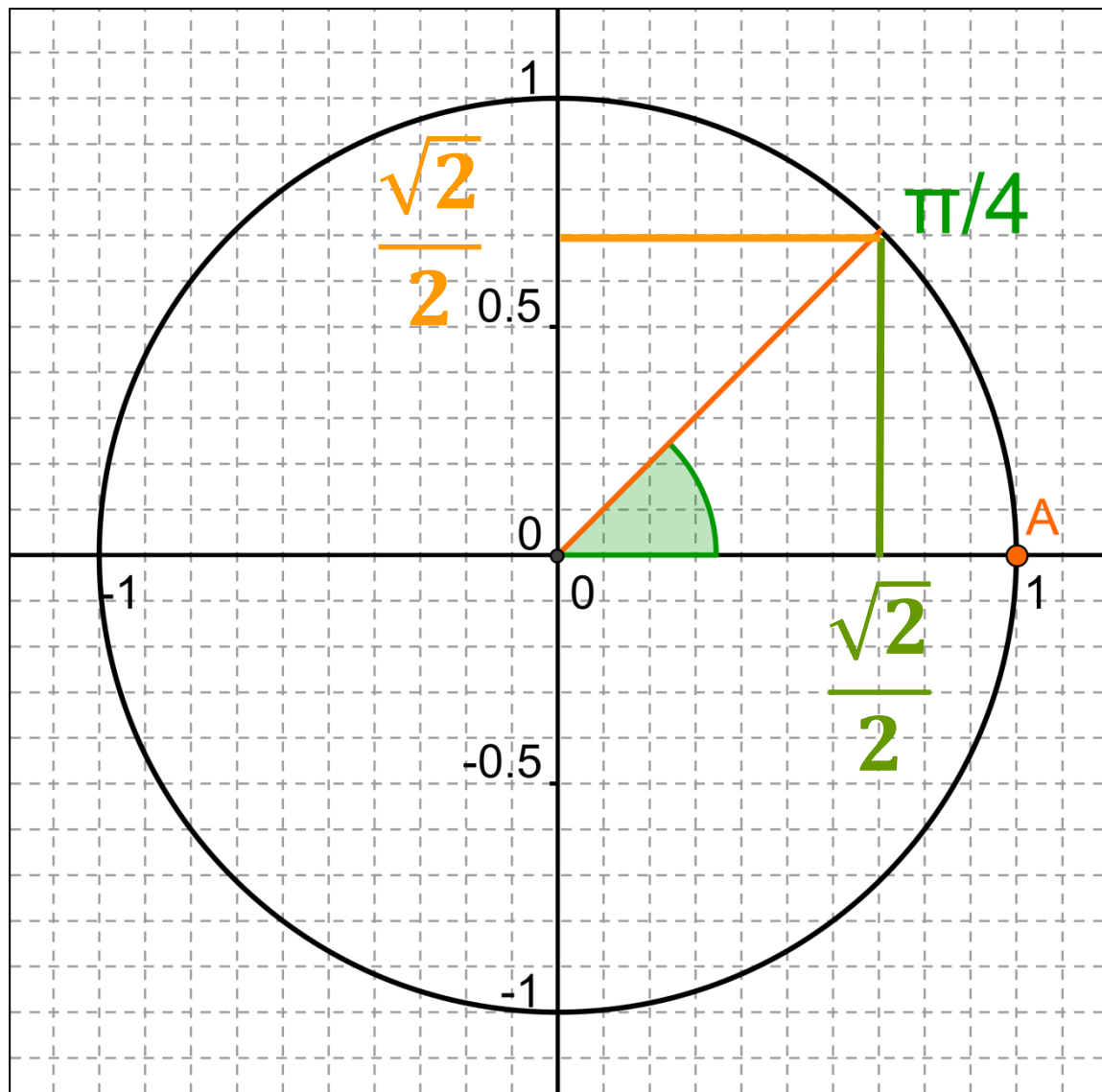
$$-\frac{\pi}{4}$$

Nº10

$$\frac{5\pi}{3}$$

**CORRECTION**

# Nº1

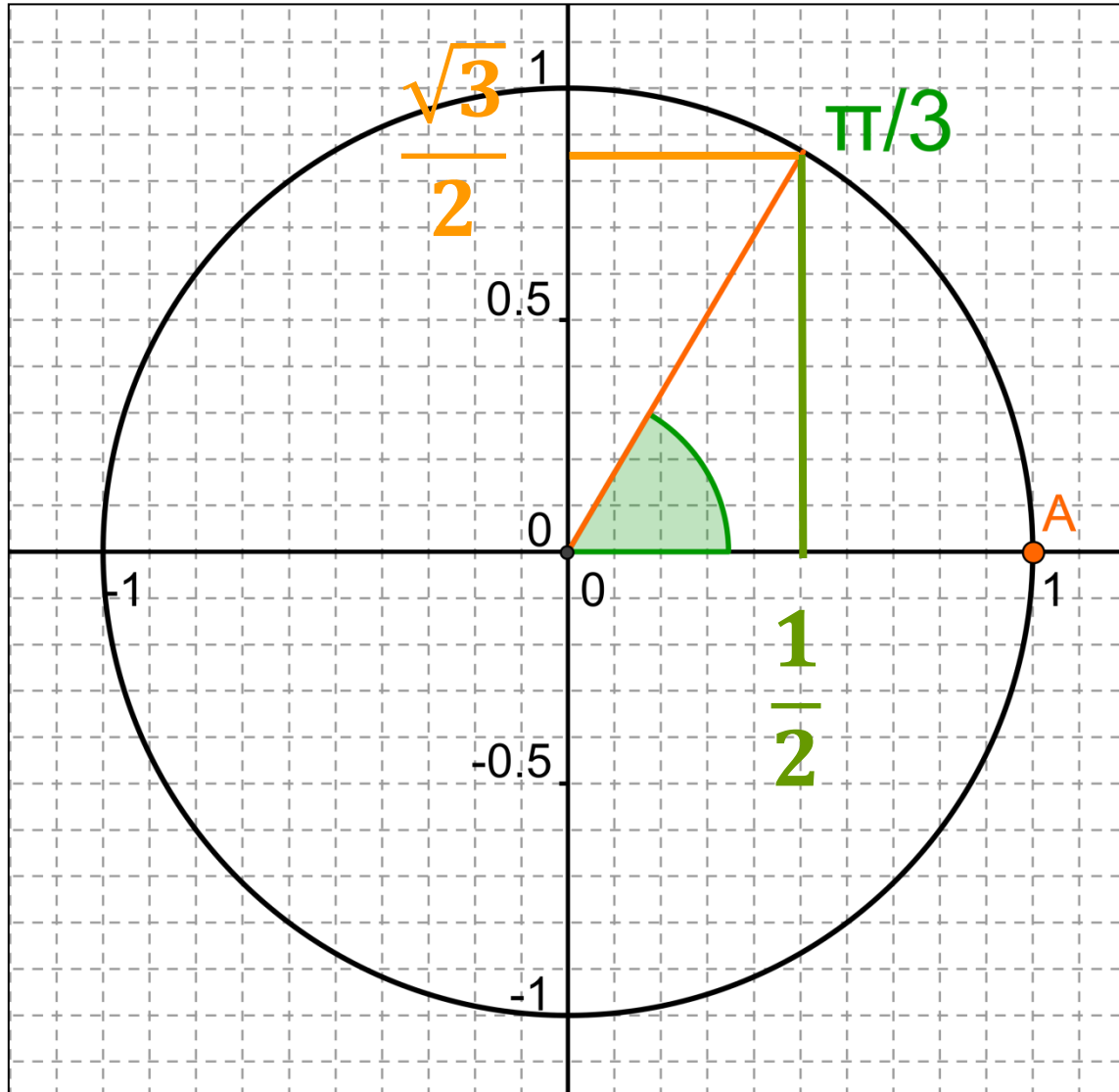


$$\cos \frac{\pi}{4} = \frac{\sqrt{2}}{2}$$

$$\sin \frac{\pi}{4} = \frac{\sqrt{2}}{2}$$

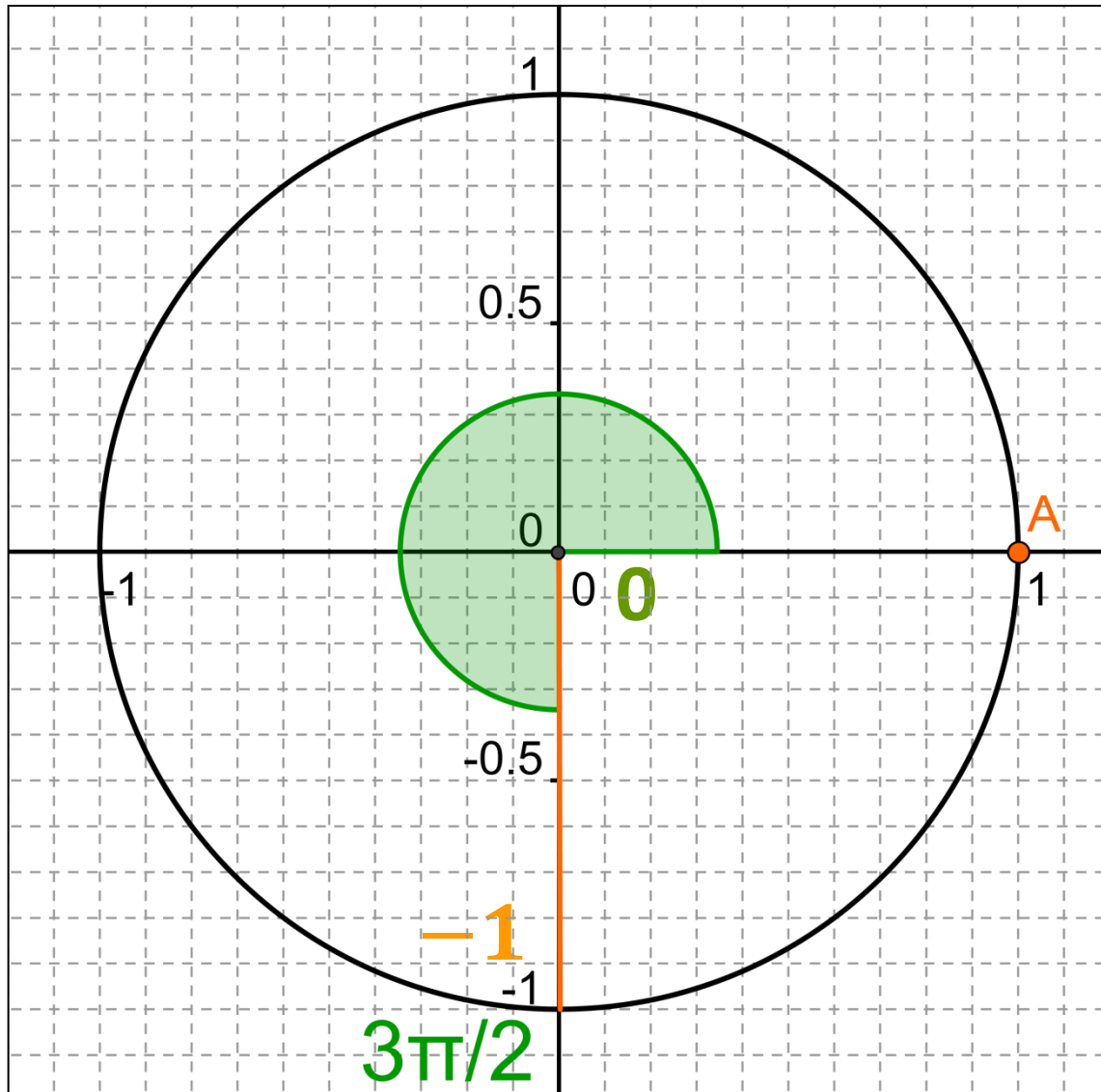


# Nº2



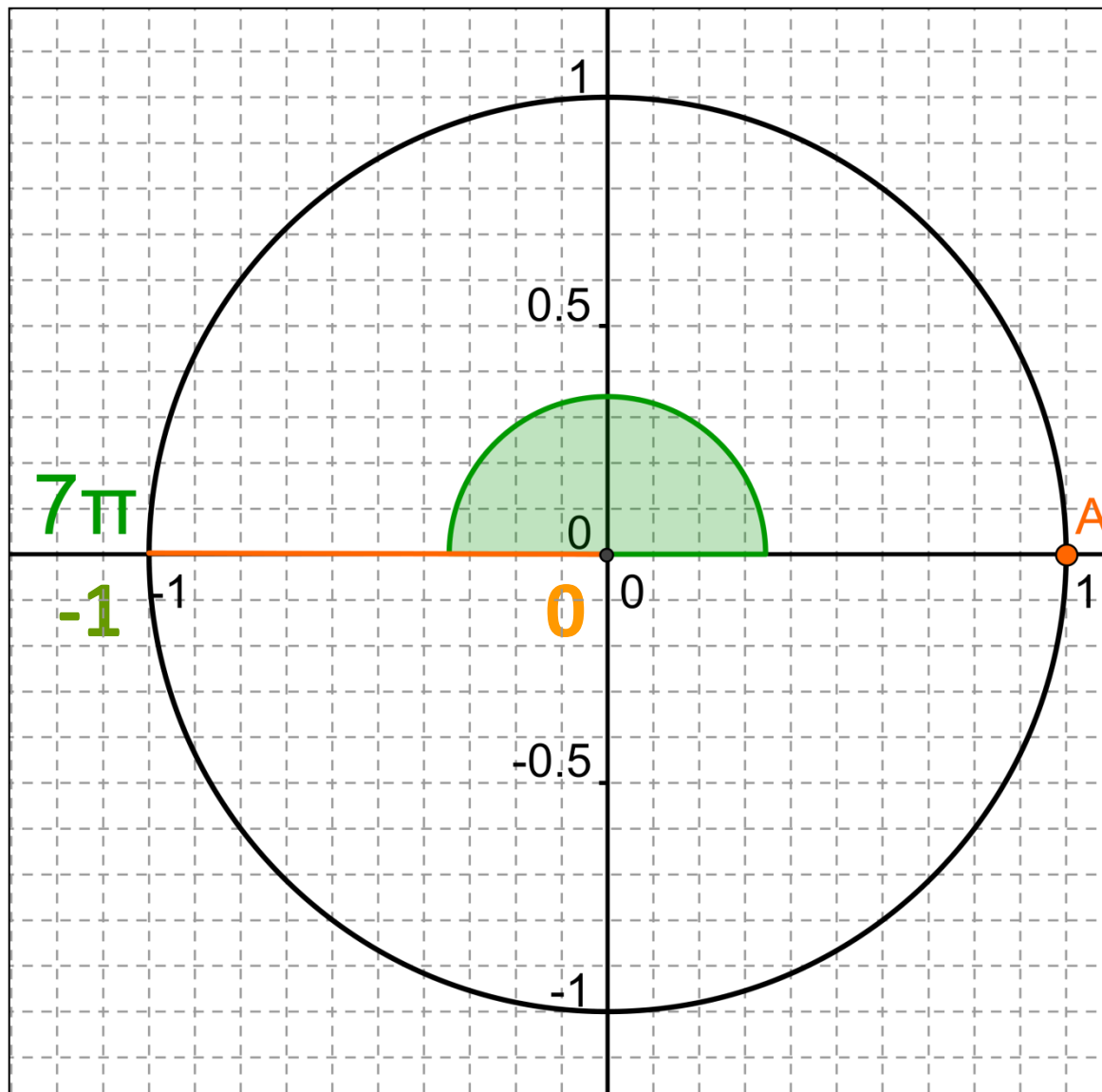
$$\cos \frac{\pi}{3} = \frac{1}{2}$$
$$\sin \frac{\pi}{3} = \frac{\sqrt{3}}{2}$$

# Nº3



$$\cos \frac{3\pi}{2} = 0$$
$$\sin \frac{3\pi}{2} = -1$$

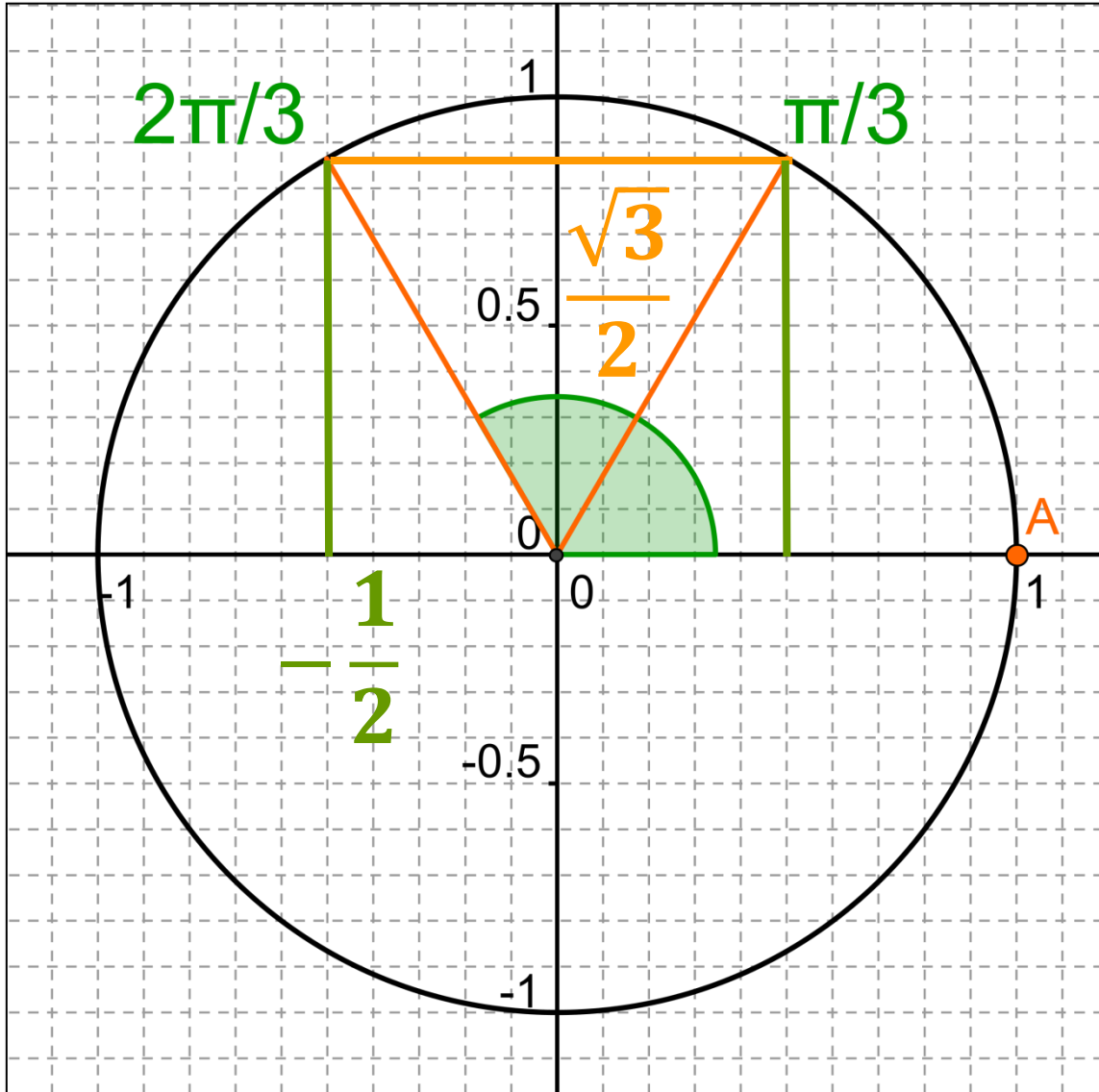
# Nº4



$$\cos 7\pi = -1$$

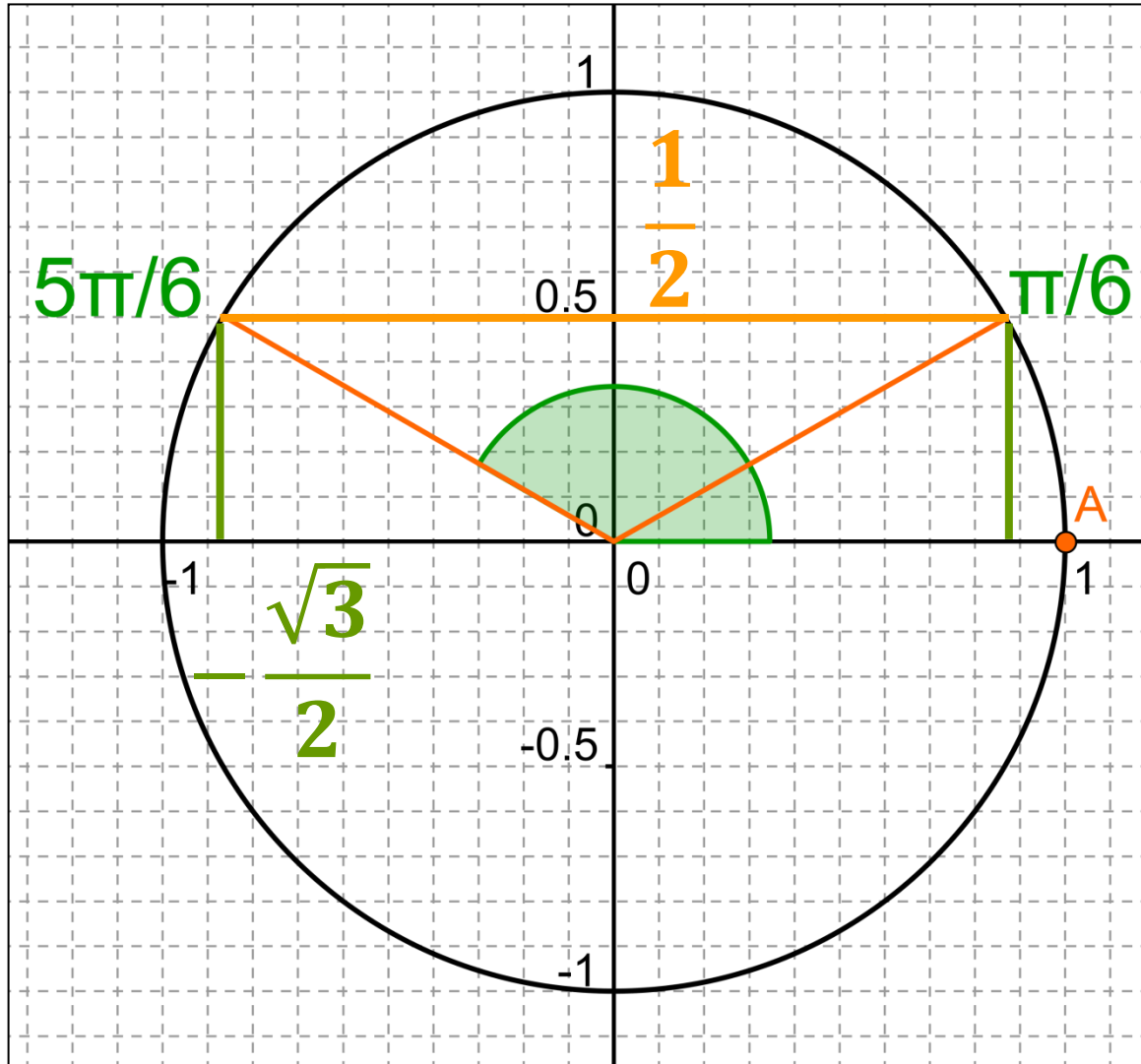
$$\sin 7\pi = 0$$

# Nº5



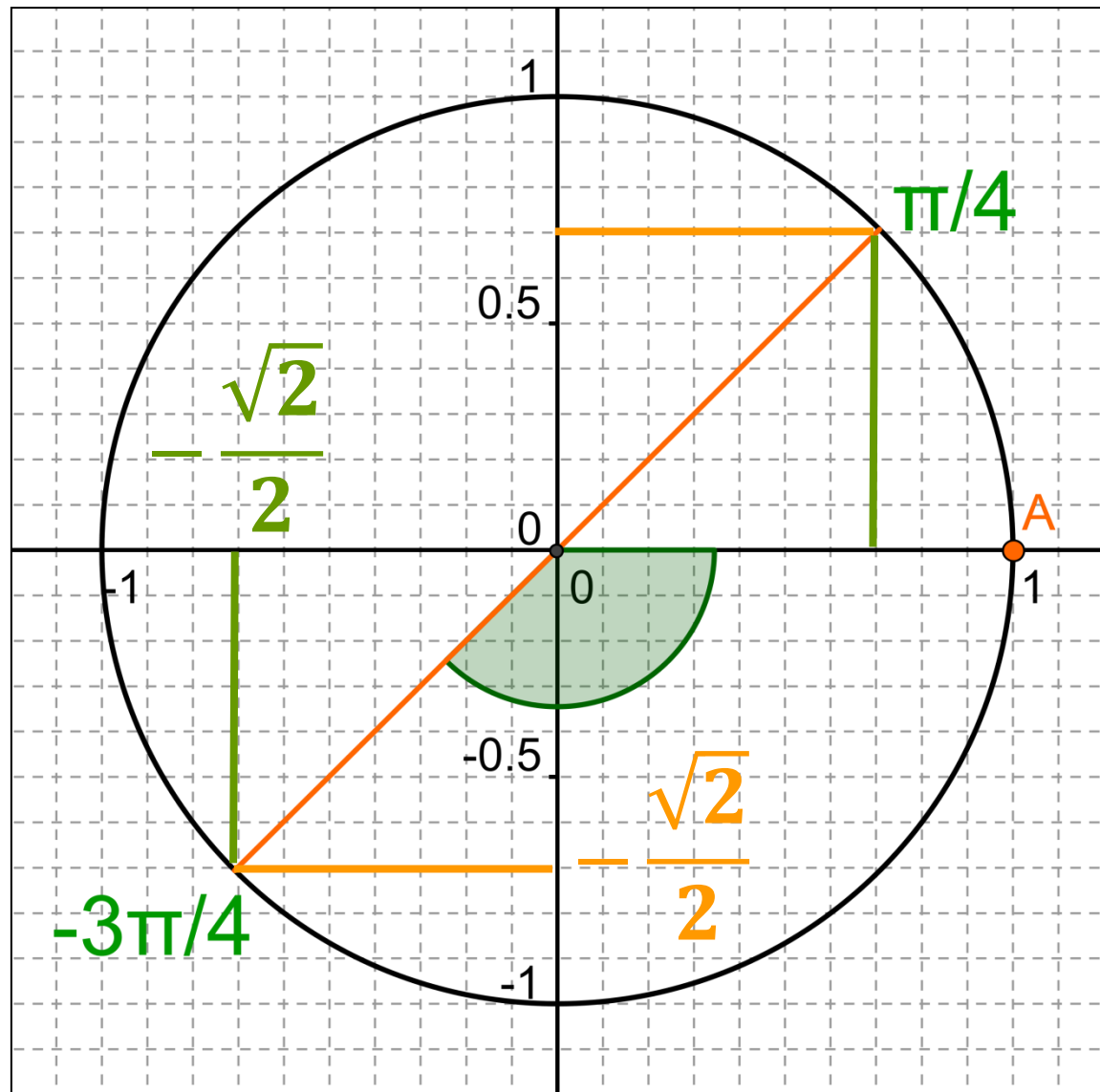
$$\cos \frac{2\pi}{3} = -\frac{1}{2}$$
$$\sin \frac{2\pi}{3} = \frac{\sqrt{3}}{2}$$

# Nº6



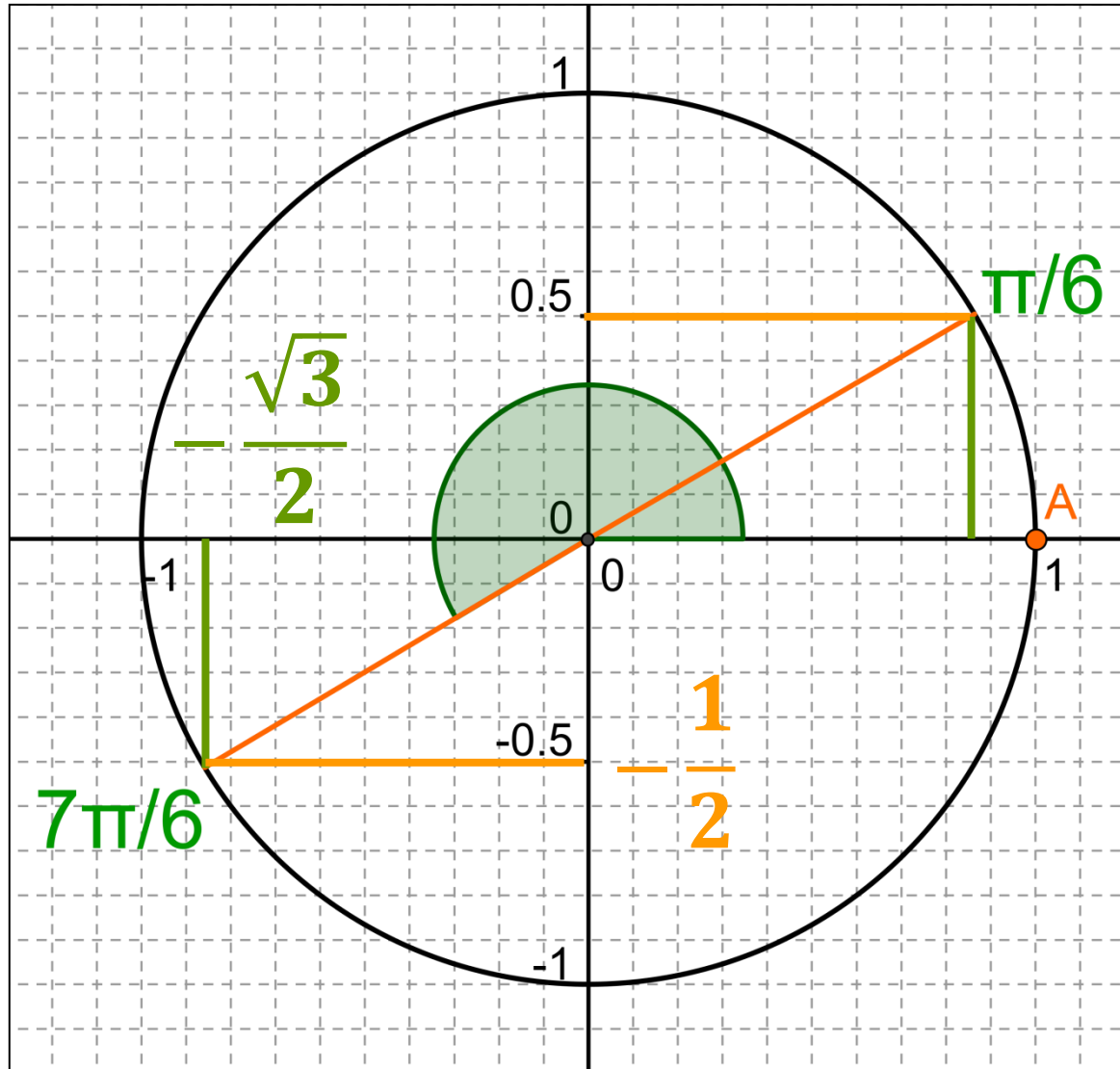
$$\cos \frac{5\pi}{6} = -\frac{\sqrt{3}}{2}$$
$$\sin \frac{5\pi}{6} = \frac{1}{2}$$

# Nº7



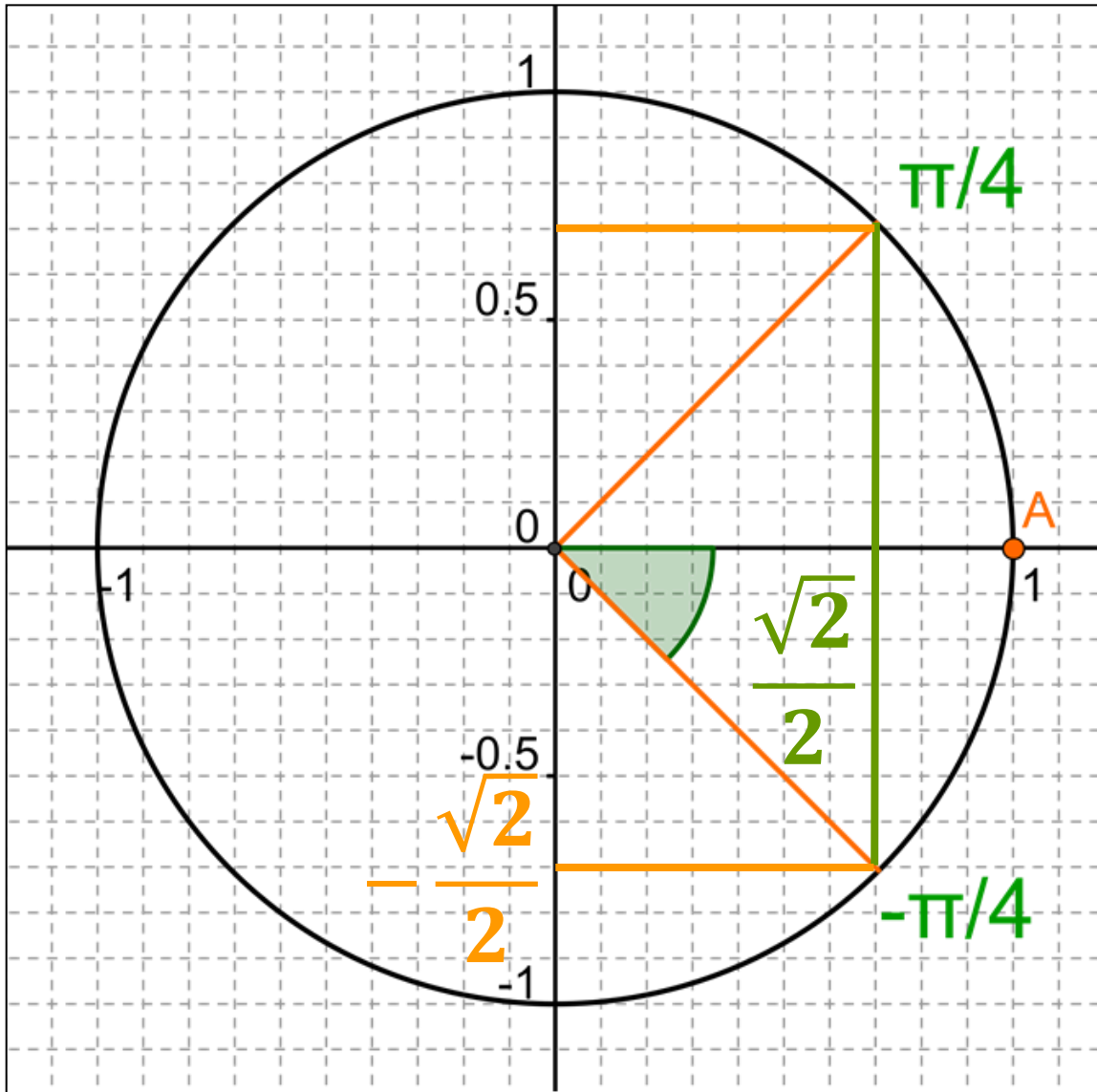
$$\cos\left(-\frac{3\pi}{4}\right) = -\frac{\sqrt{2}}{2}$$
$$\sin\left(-\frac{3\pi}{4}\right) = -\frac{\sqrt{2}}{2}$$

# Nº8



$$\cos \frac{7\pi}{6} = -\frac{\sqrt{3}}{2}$$
$$\sin \frac{7\pi}{6} = -\frac{1}{2}$$

# Nº9

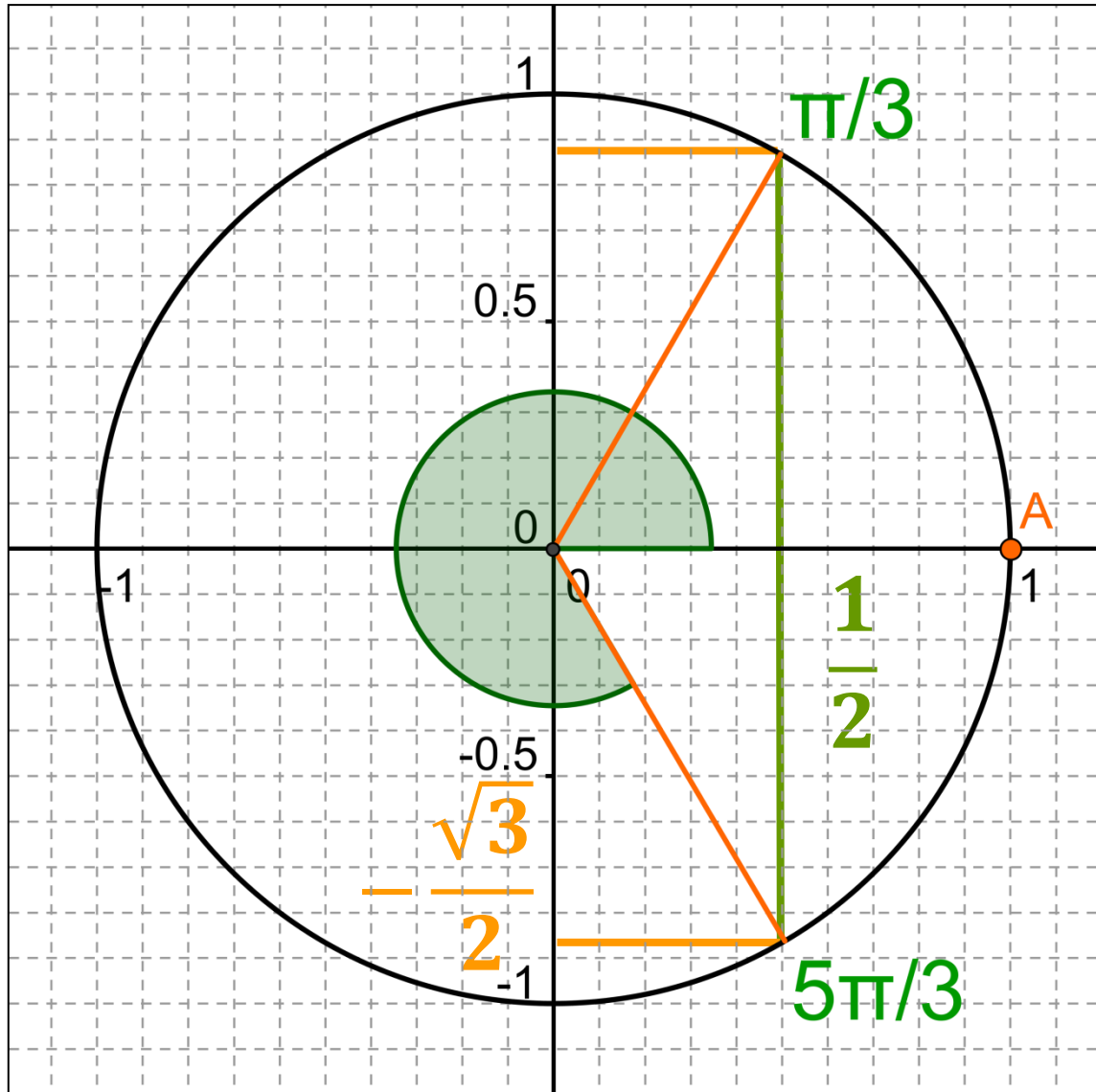


$$\cos\left(-\frac{\pi}{4}\right) = \frac{\sqrt{2}}{2}$$

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



# Nº10



$$\cos \frac{5\pi}{3} = \frac{1}{2}$$
$$\sin \frac{5\pi}{3} = -\frac{\sqrt{3}}{2}$$

**FIN**