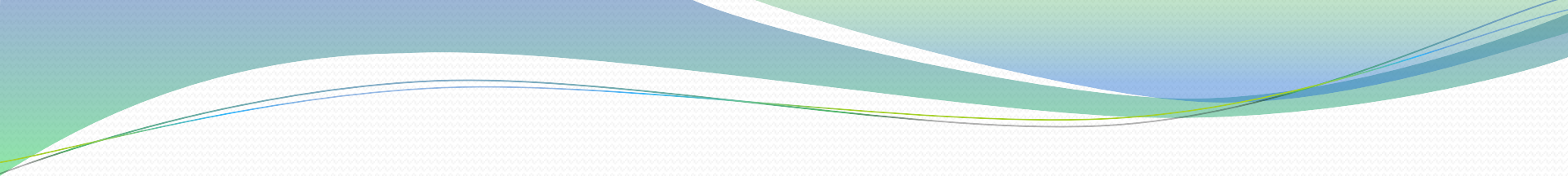


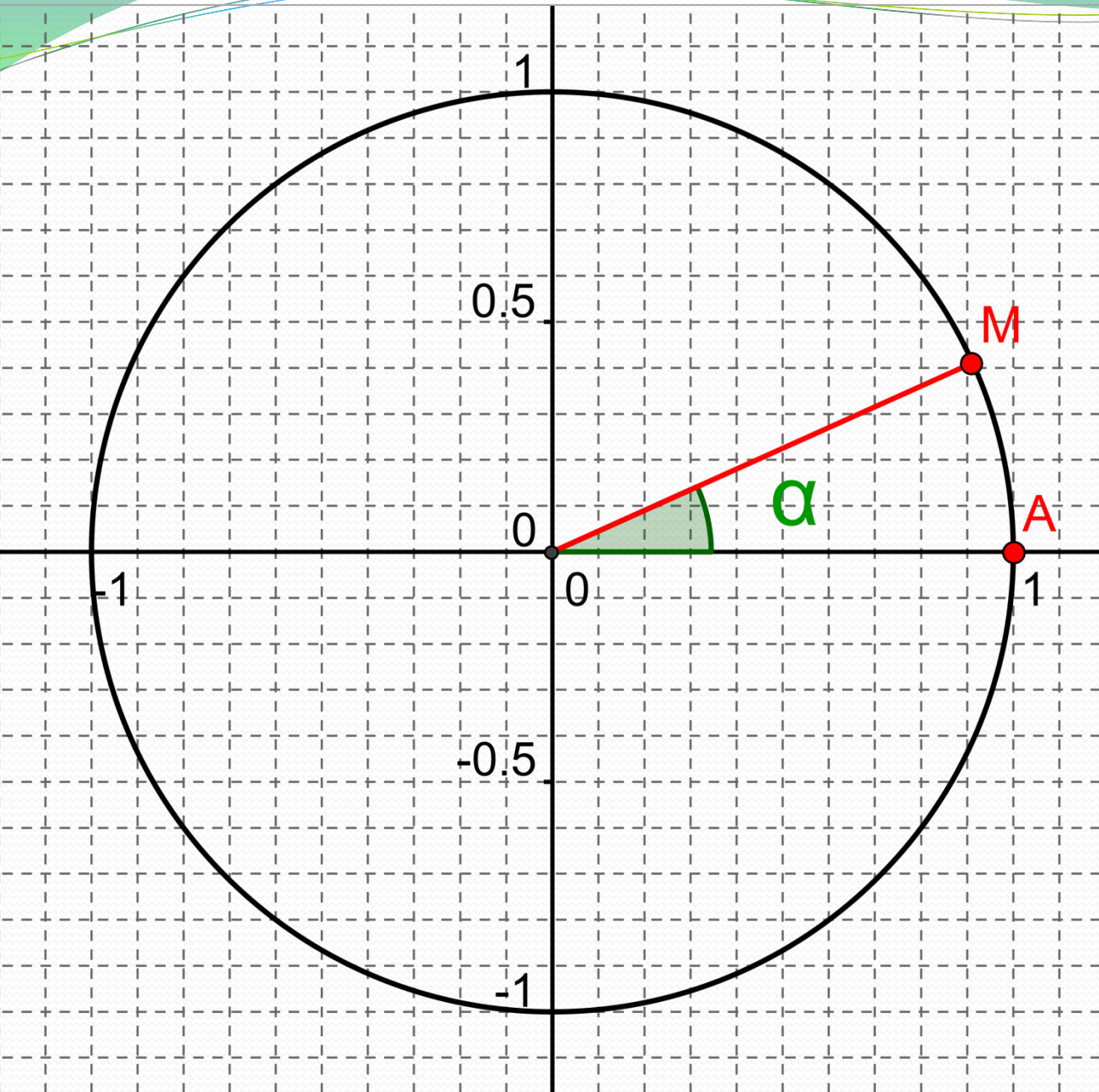
# Trigonométrie

## Série 5

Activités mentales et automatismes en classe de première  
IREM de Clermont-Ferrand



Lire des valeurs  
approchées des sinus et  
cosinus des réels suivants :

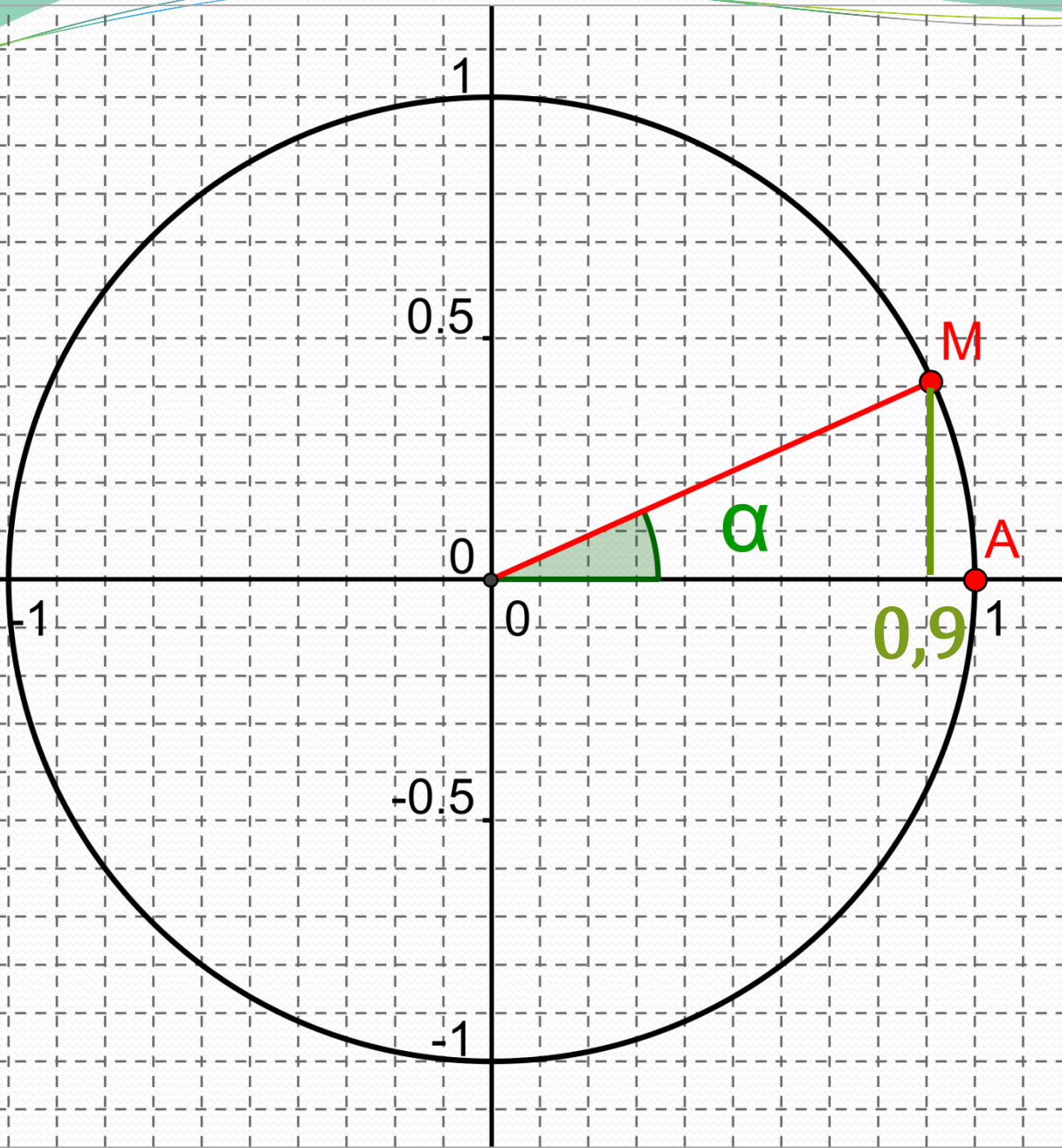


## Question 0

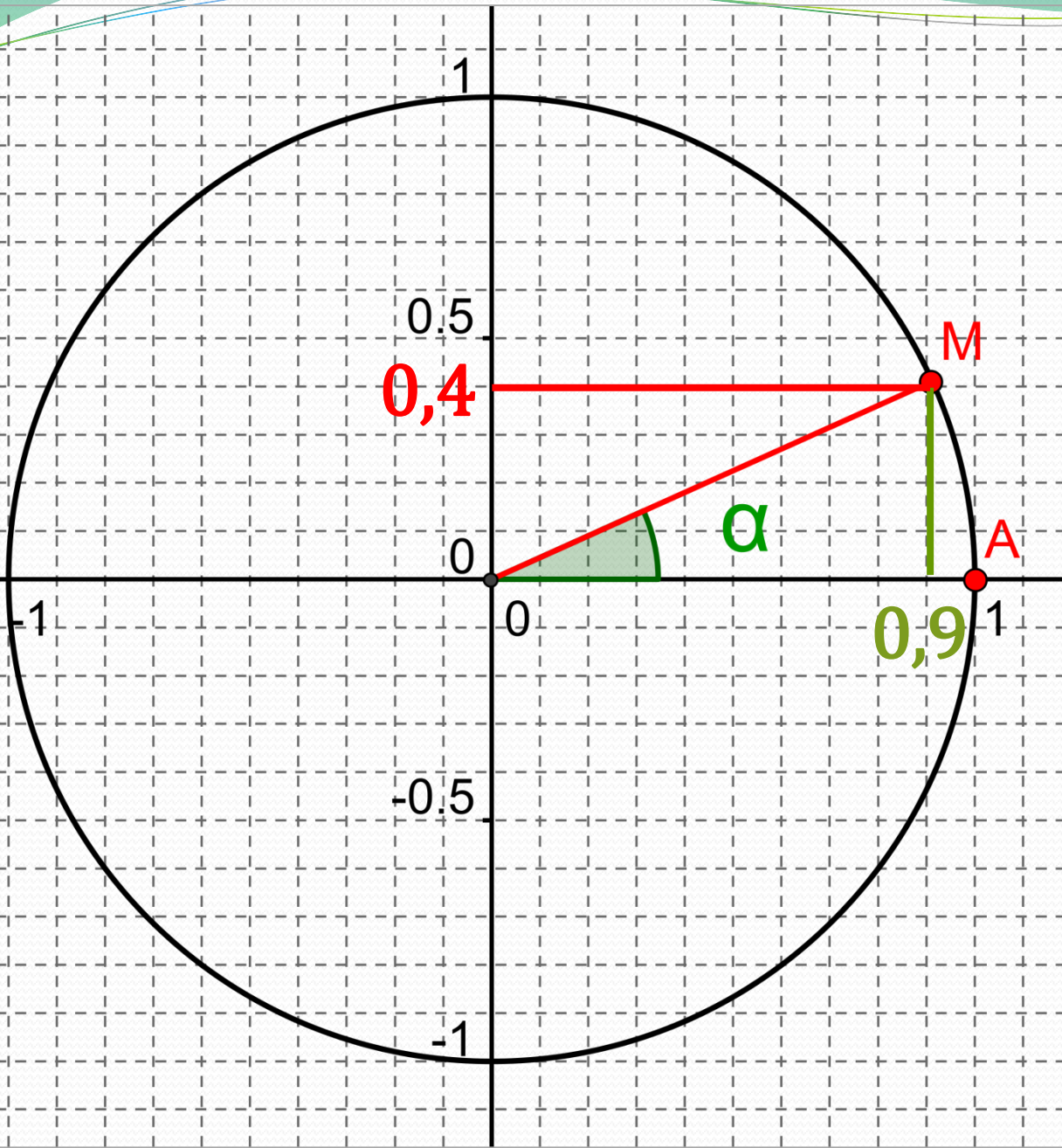
$\cos \alpha ?$

$\sin \alpha ?$

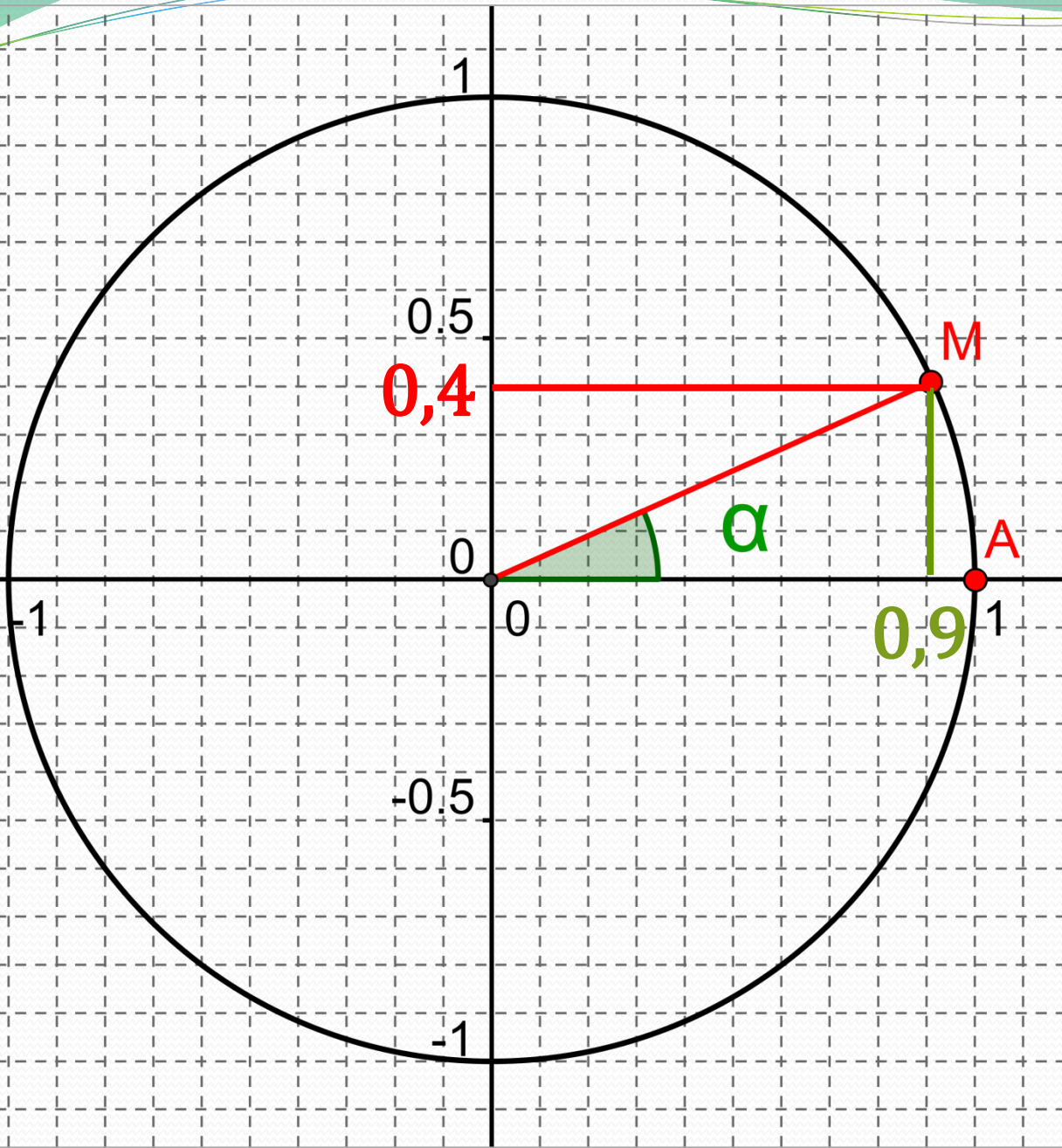
# Question 0



# Question 0

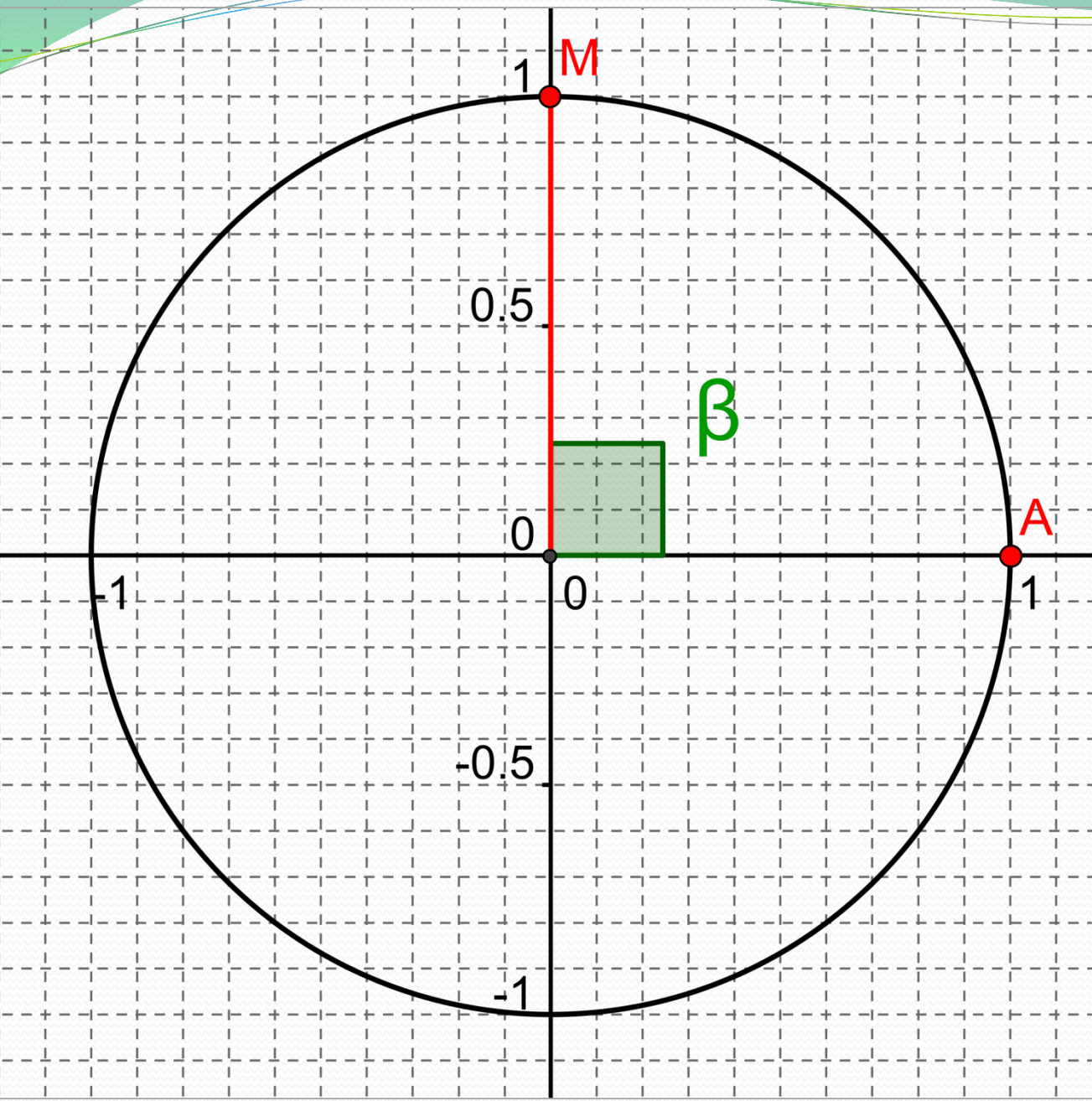


## Question 0



$$\cos \alpha \approx 0,9$$

$$\sin \alpha \approx 0,4$$



## Question 1

$\cos \beta$  ?

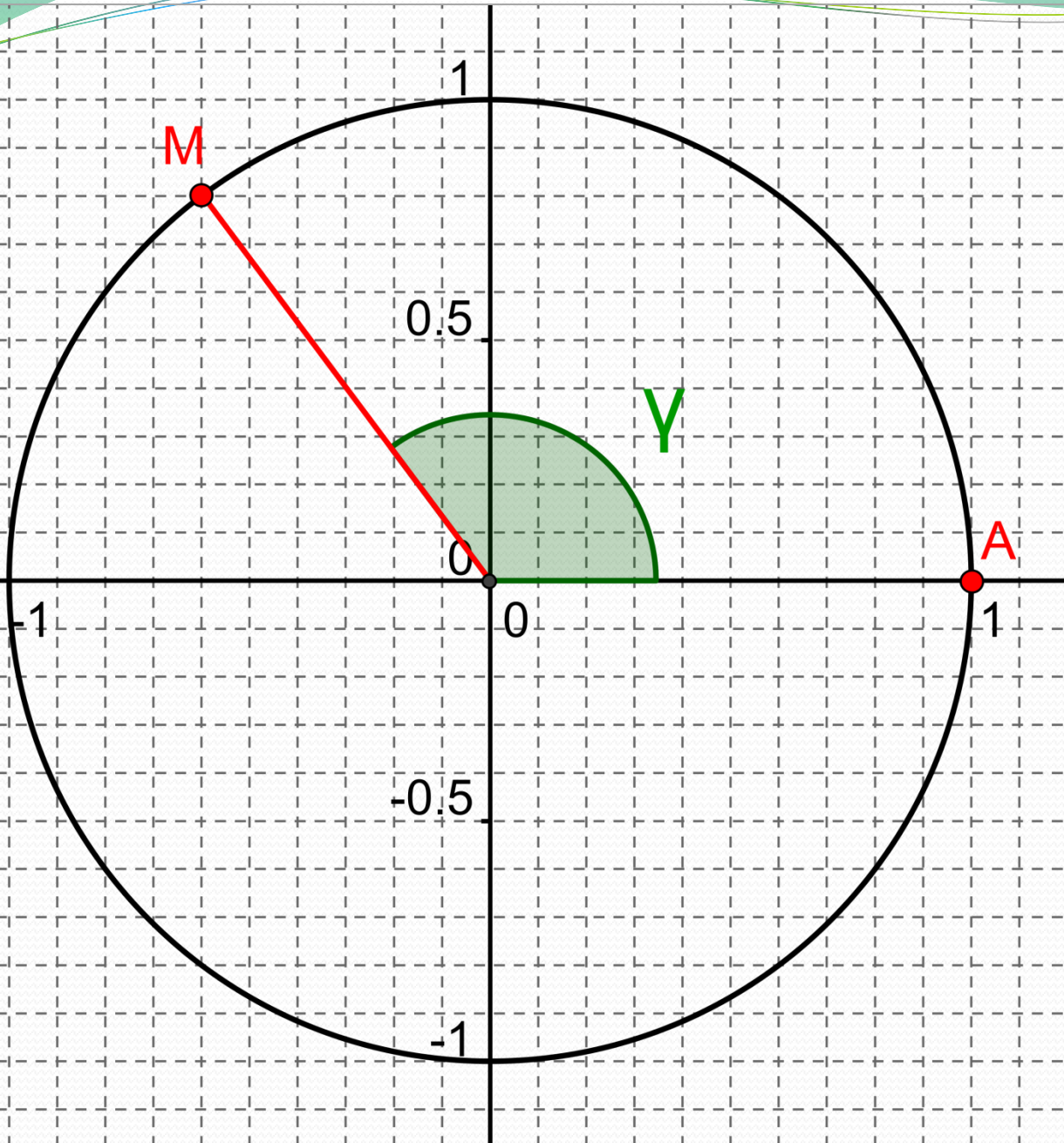
$\sin \beta$  ?



## Question 2

$\cos \gamma$  ?

$\sin \gamma$  ?

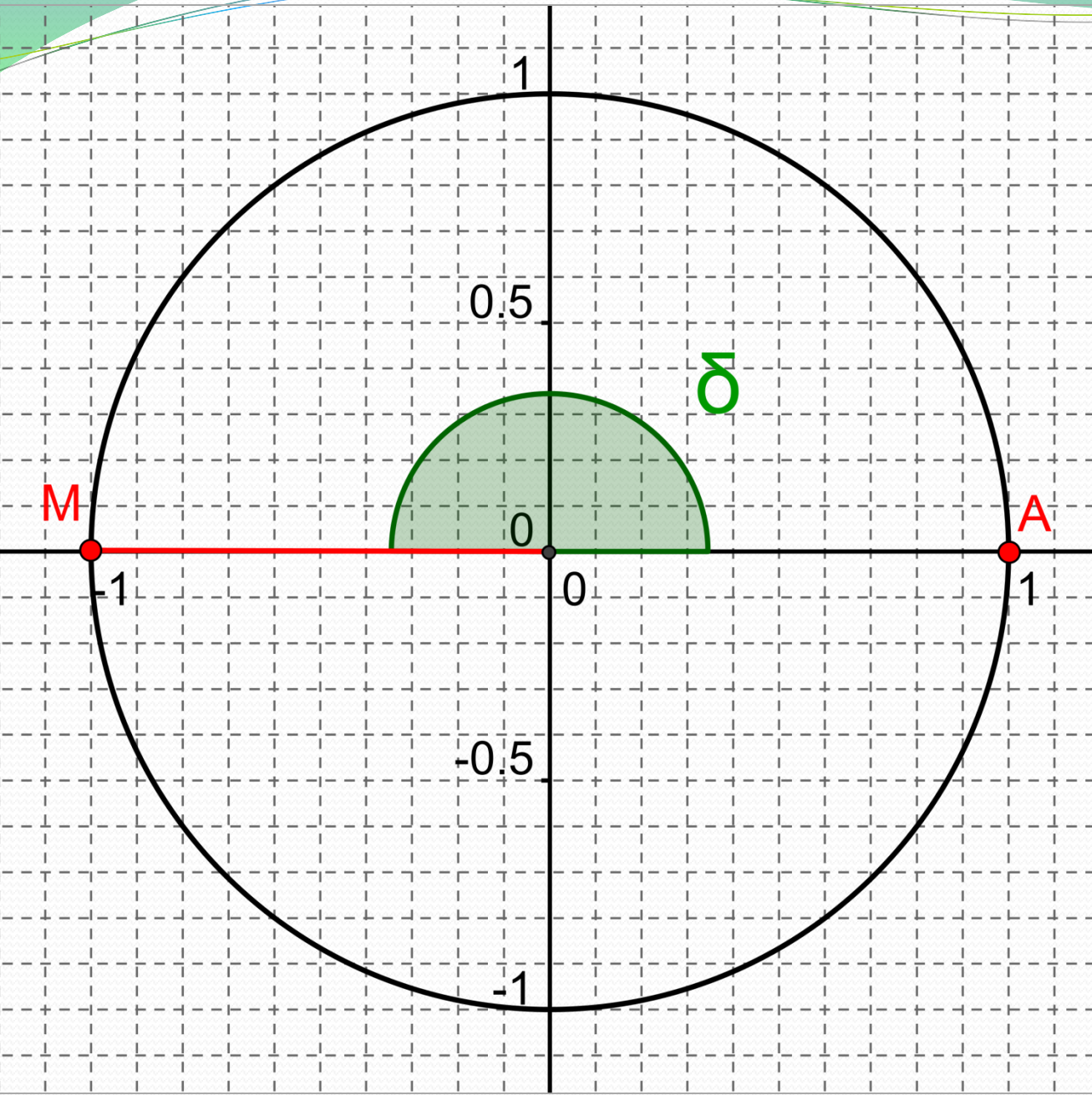




### Question 3

$\cos \delta$  ?

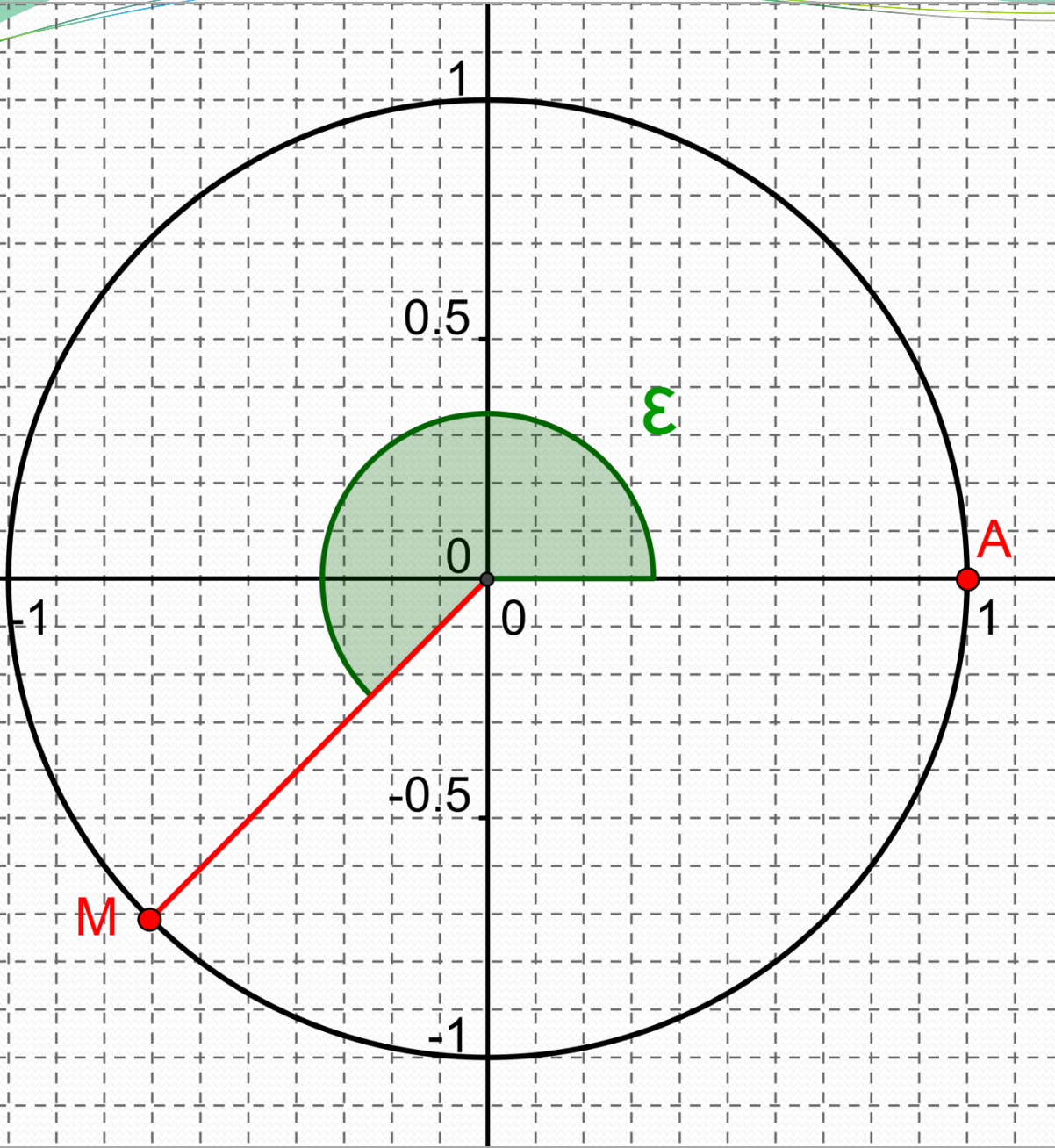
$\sin \delta$  ?



## Question 4

$\cos \varepsilon$  ?

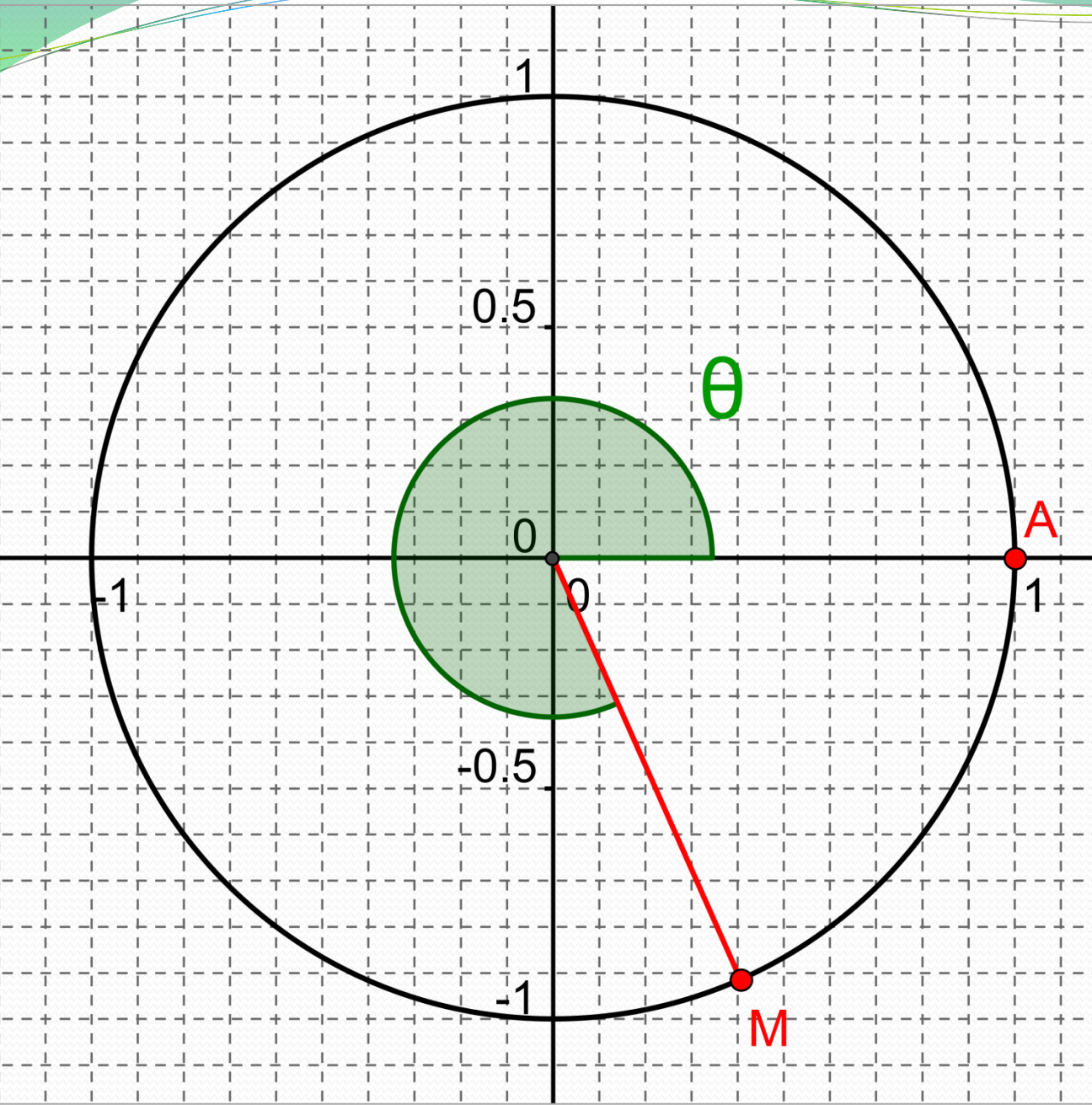
$\sin \varepsilon$  ?



## Question 5

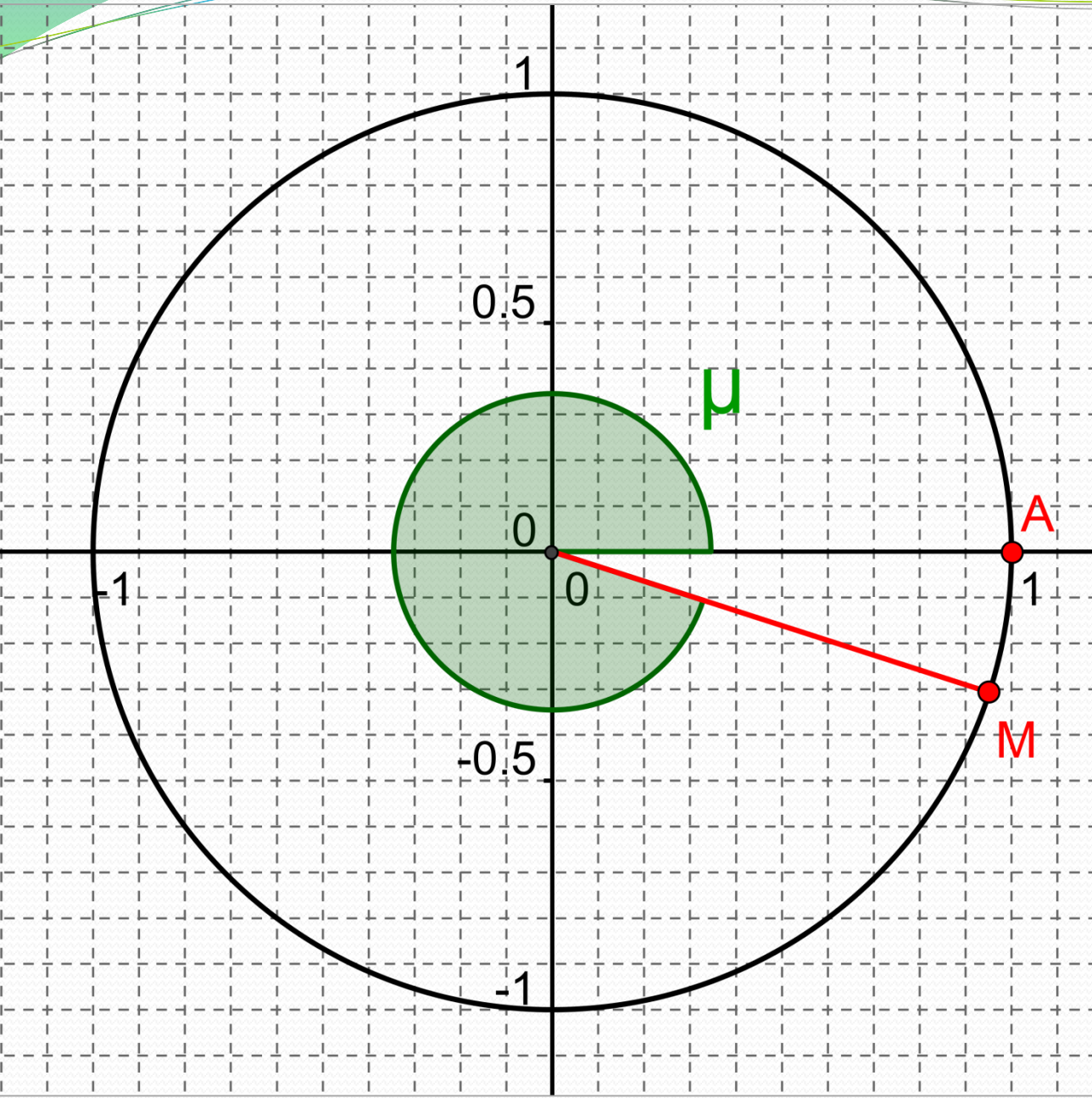
$\cos\theta$  ?

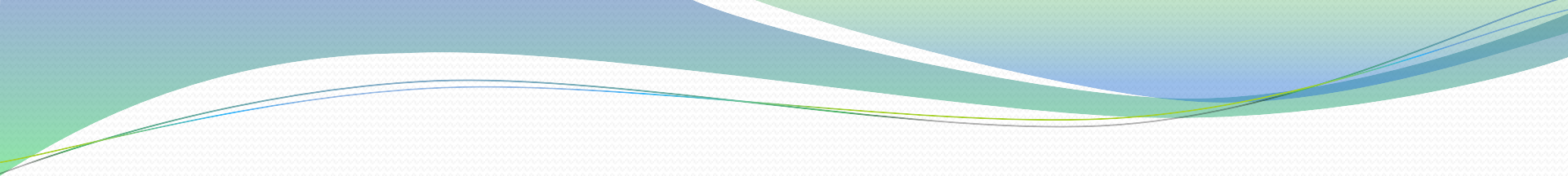
$\sin\theta$  ?



## Question 6

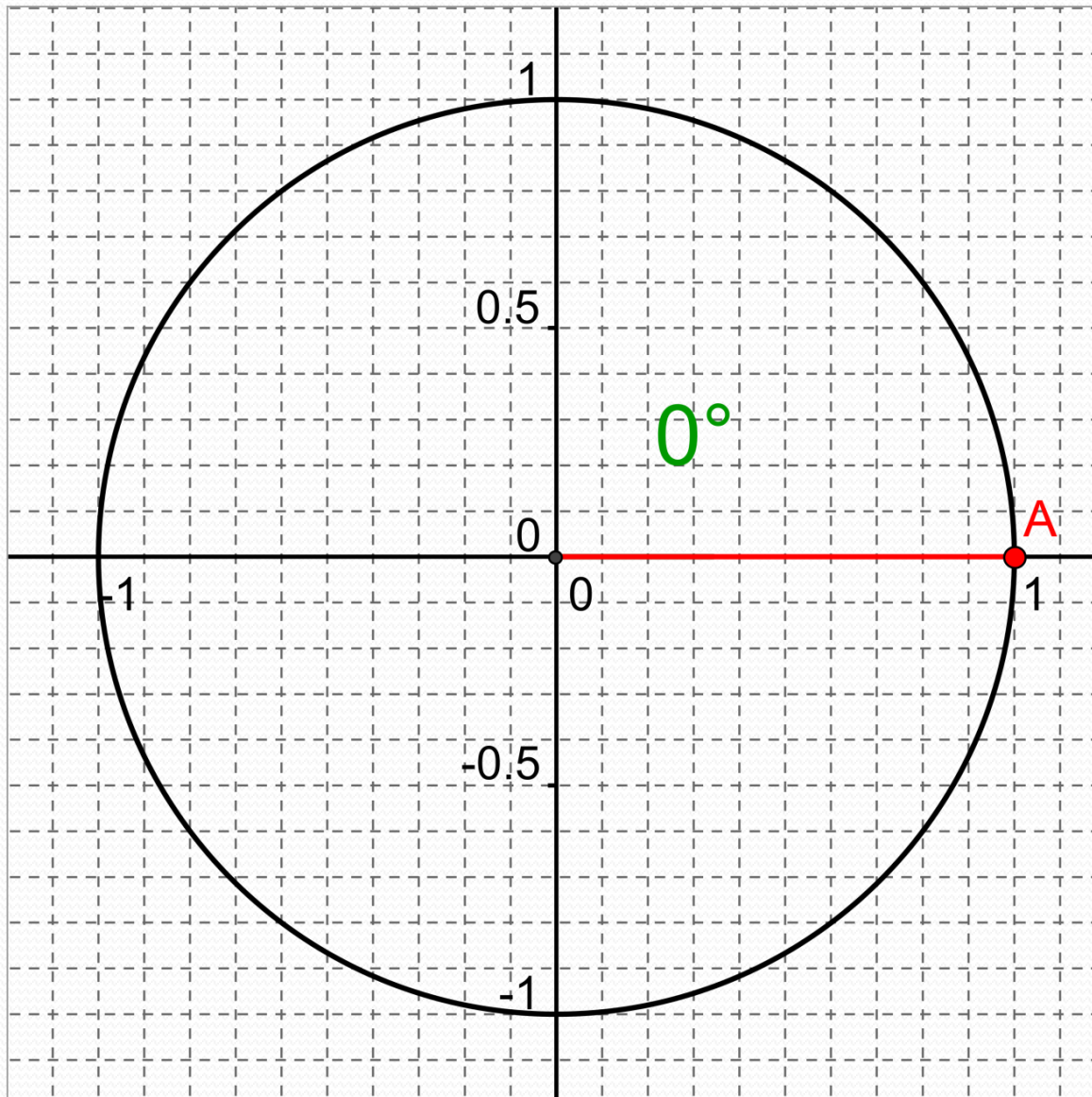
$\cos \mu$  ?  
 $\sin \mu$  ?





Donner les valeurs  
exactes des sinus et cosinus  
des mesures d'angles  
suivantes :

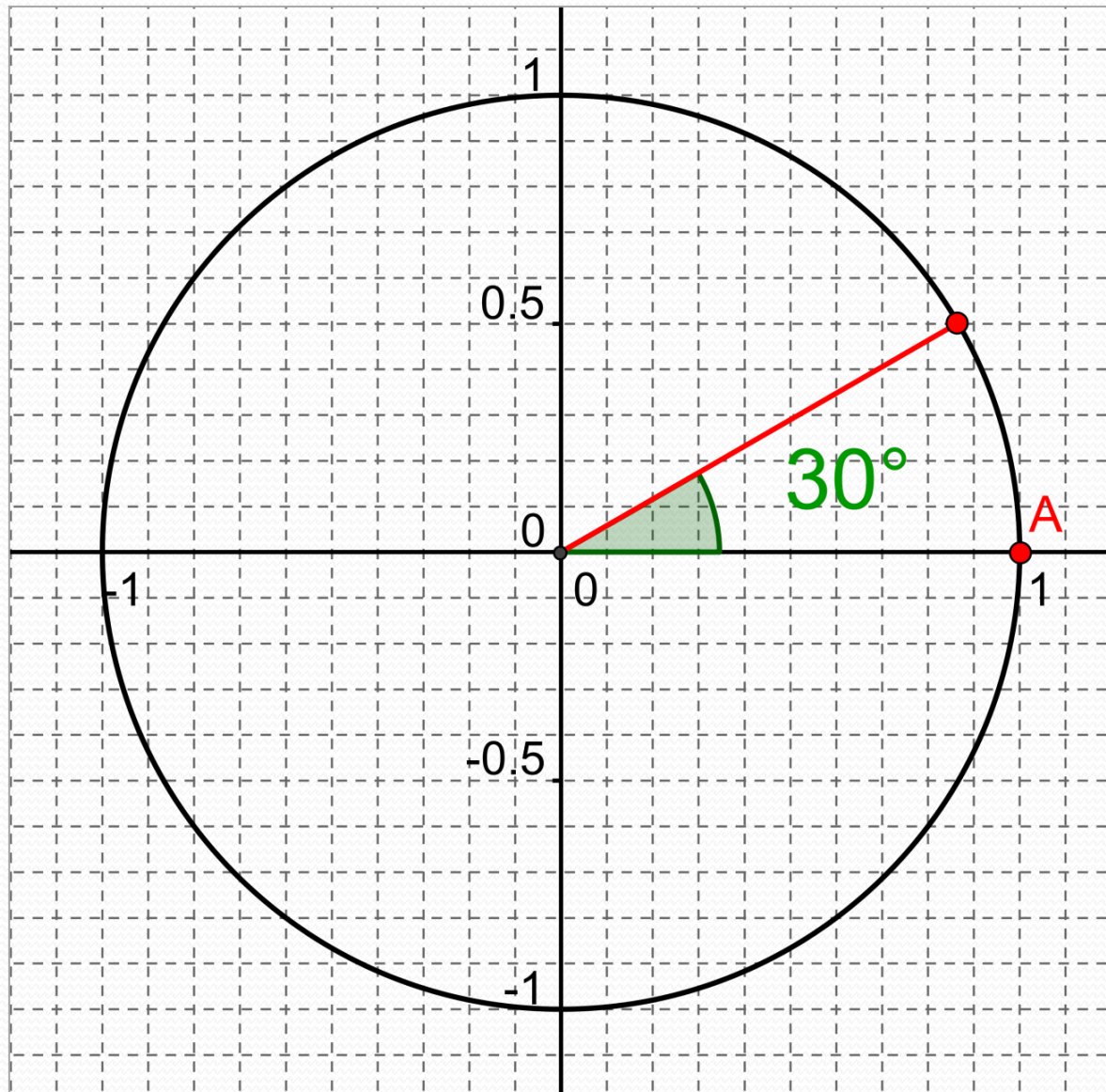
## Question 7



$\cos 0^\circ ?$

$\sin 0^\circ ?$

## Question 8

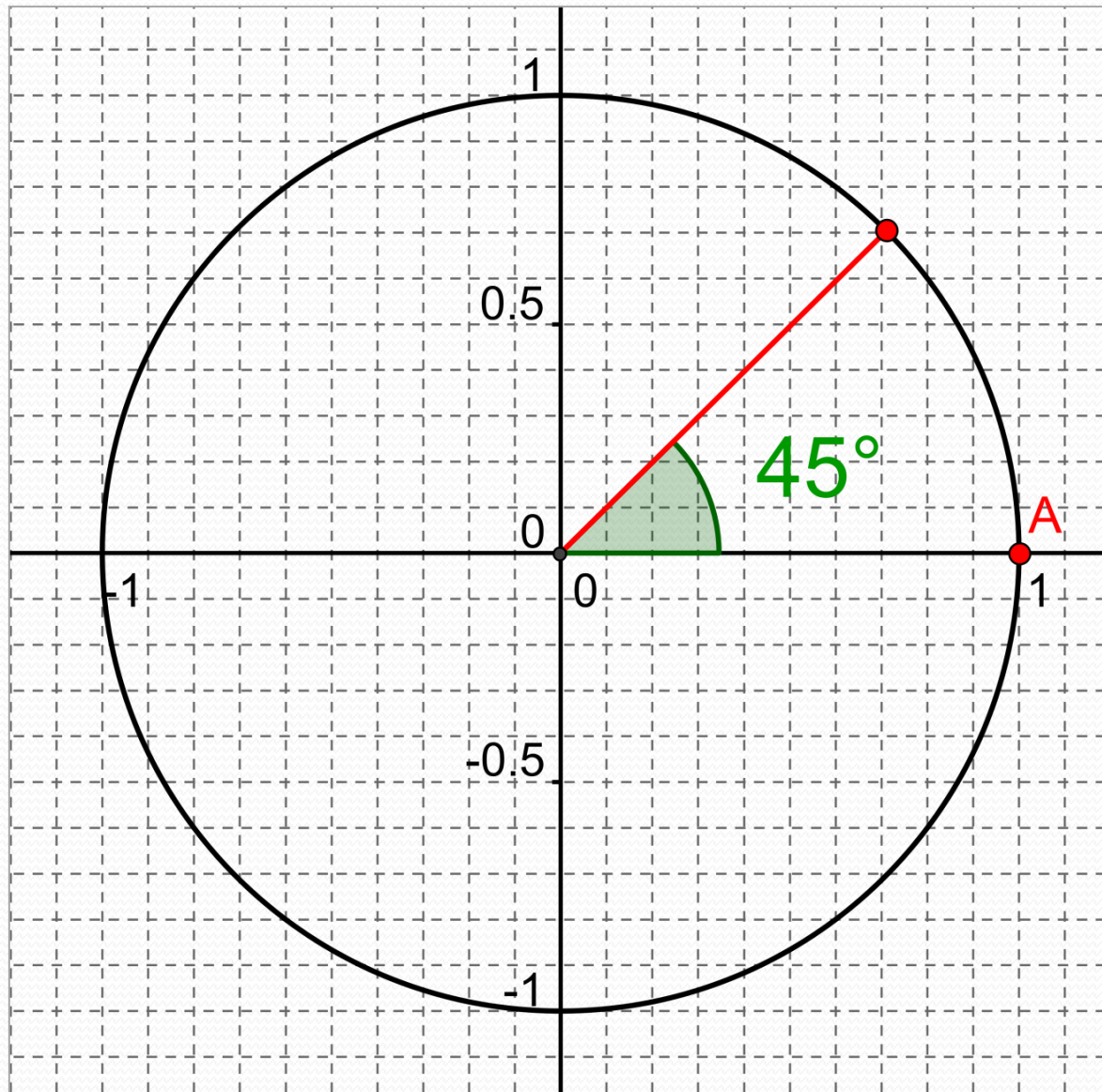


$\cos 30^\circ ?$

$\sin 30^\circ ?$



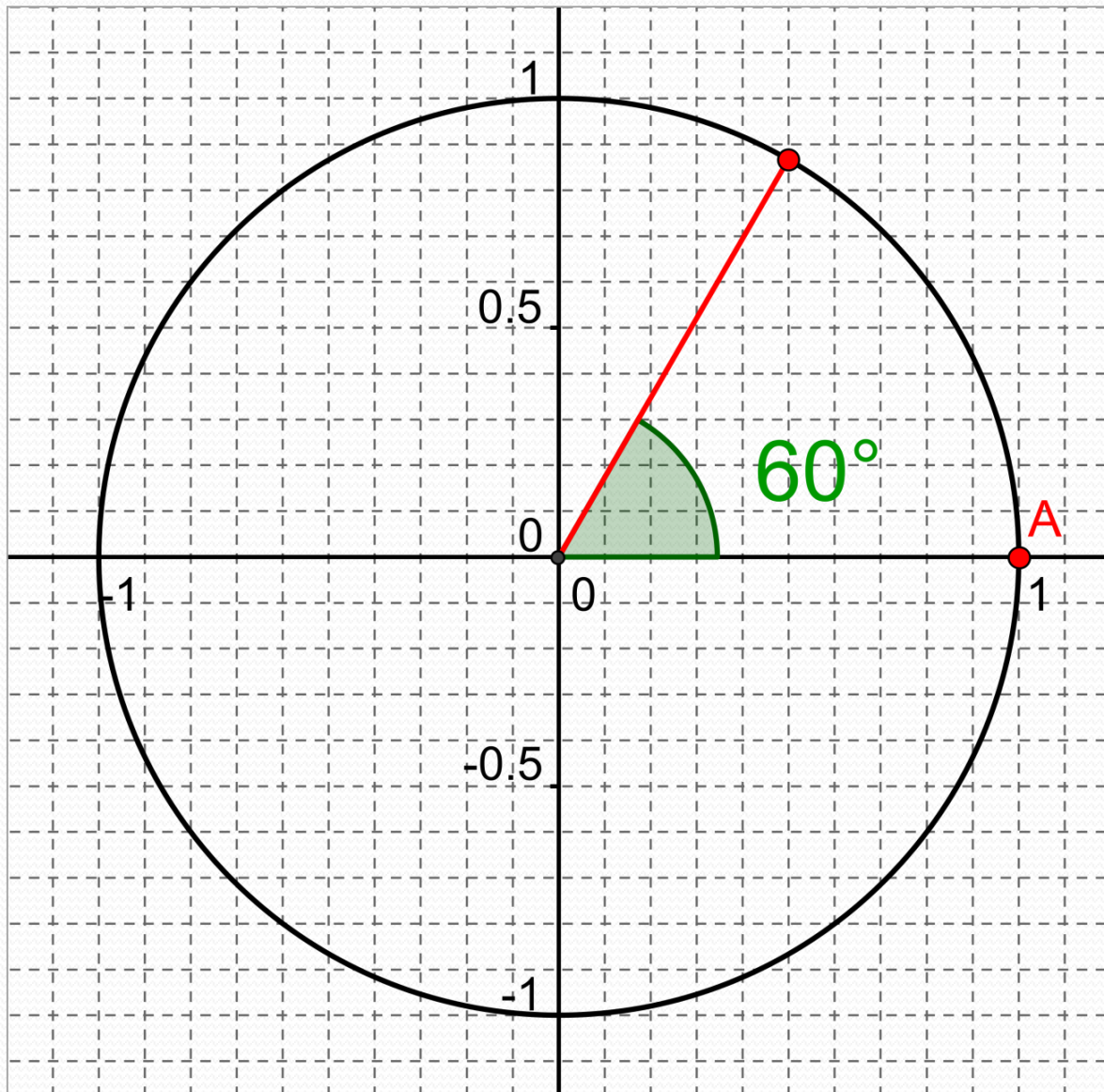
## Question 9



$\cos 45^\circ ?$

$\sin 45^\circ ?$

## Question 10



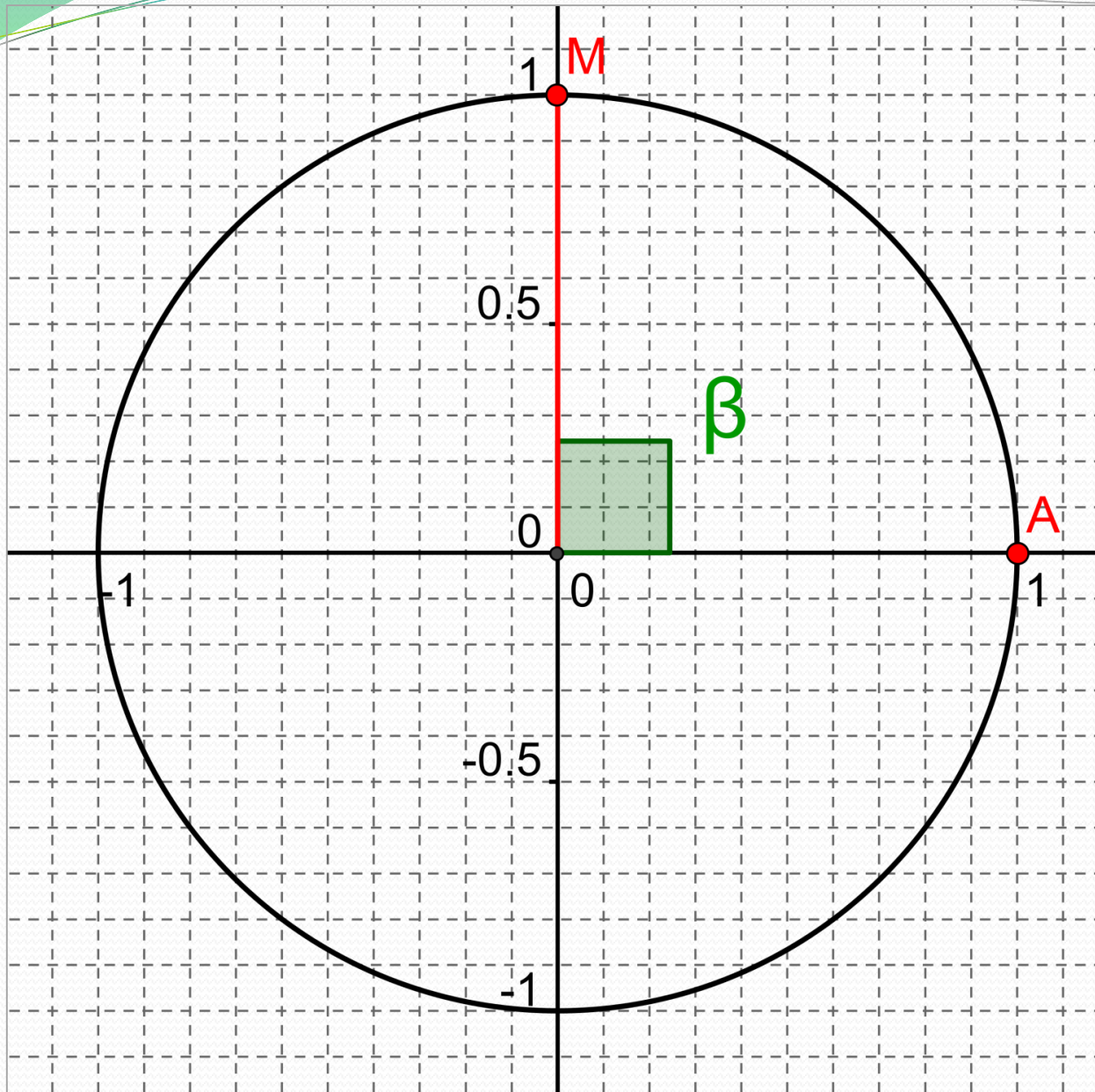
$\cos 60^\circ ?$

$\sin 60^\circ ?$

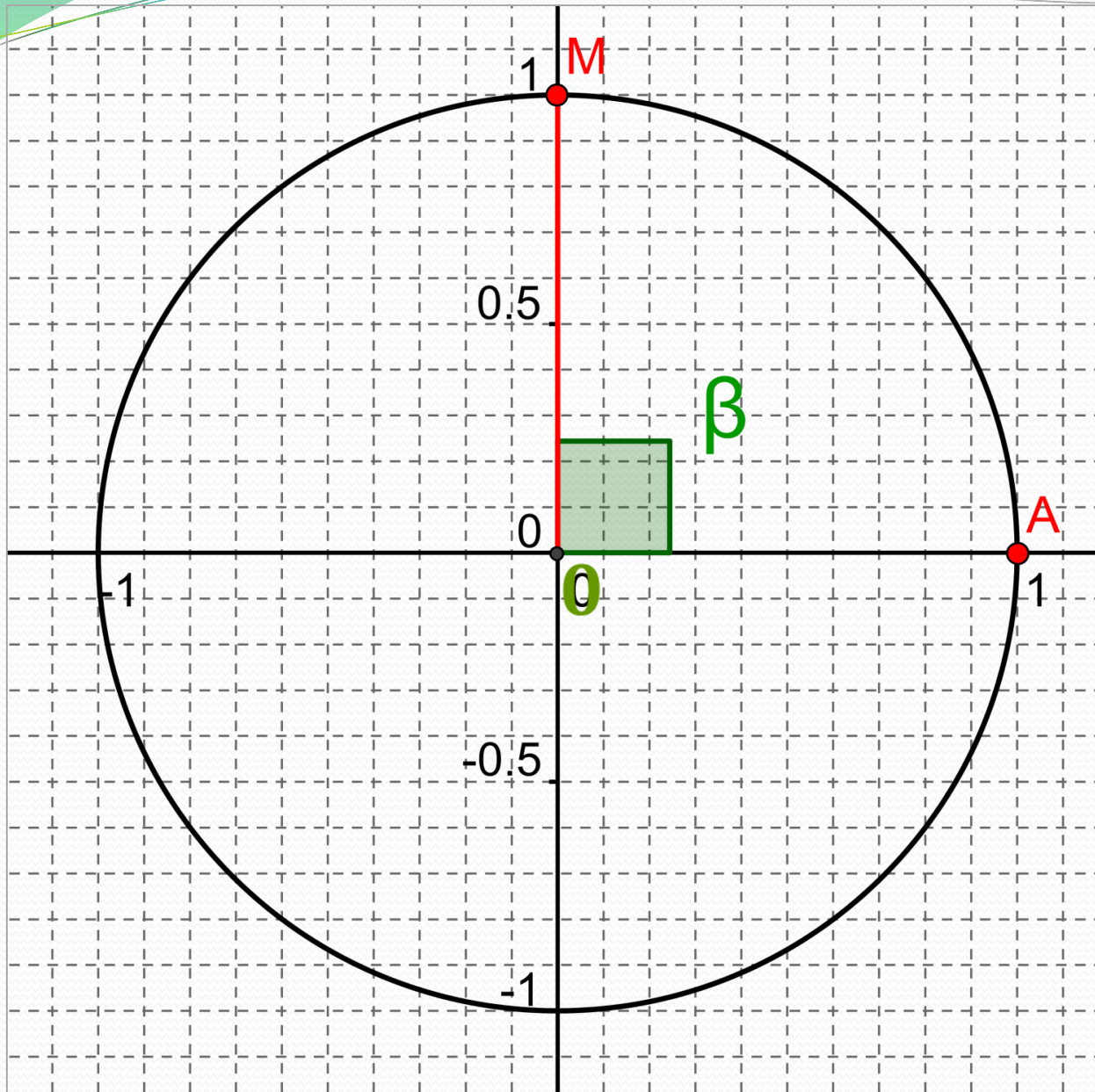
# Correction

Activités mentales et automatismes en classe de première  
IREM de Clermont-Ferrand

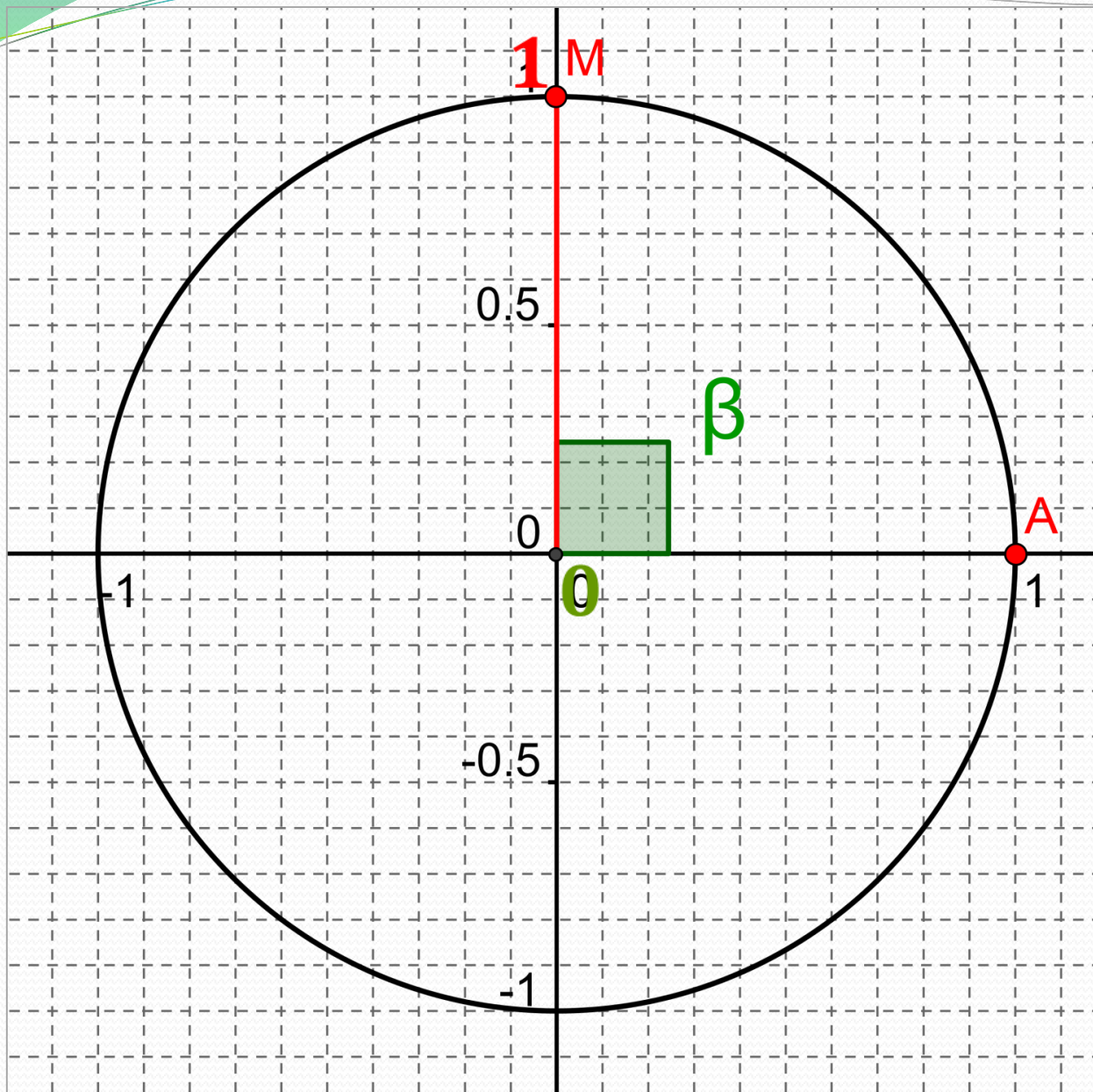
# Question 1



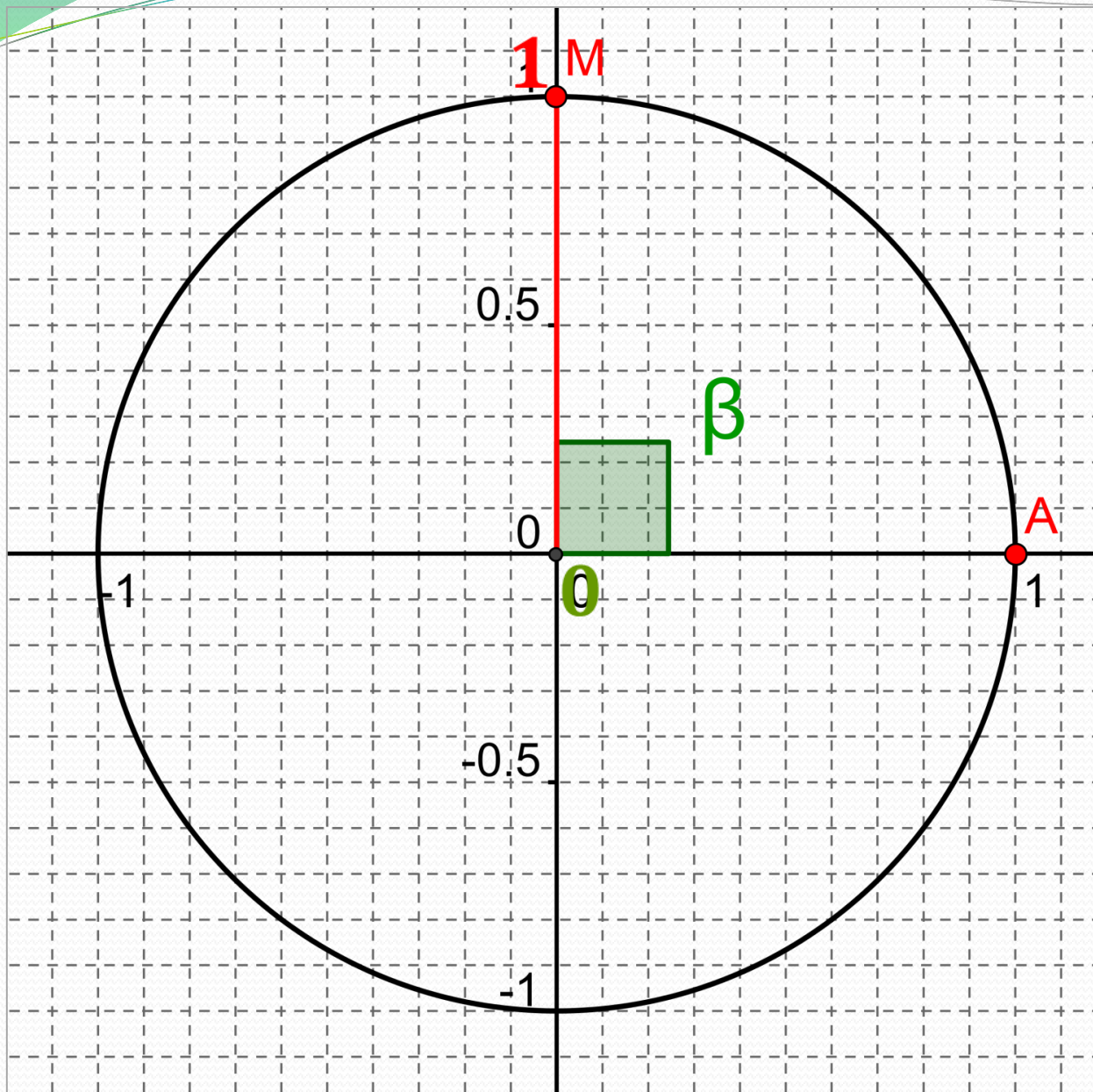
# Question 1



# Question 1



# Question 1

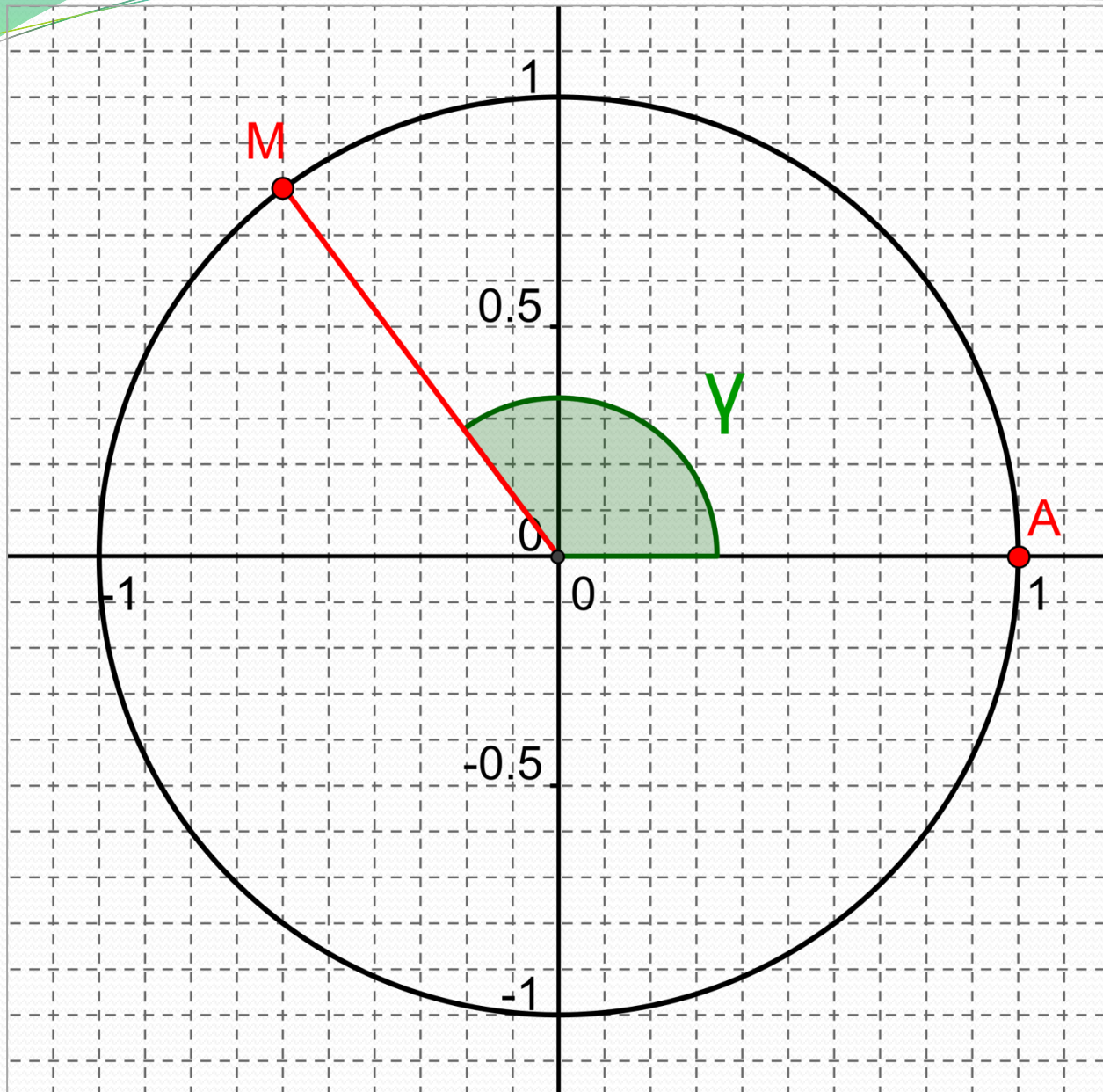


$$\cos \beta = 0$$

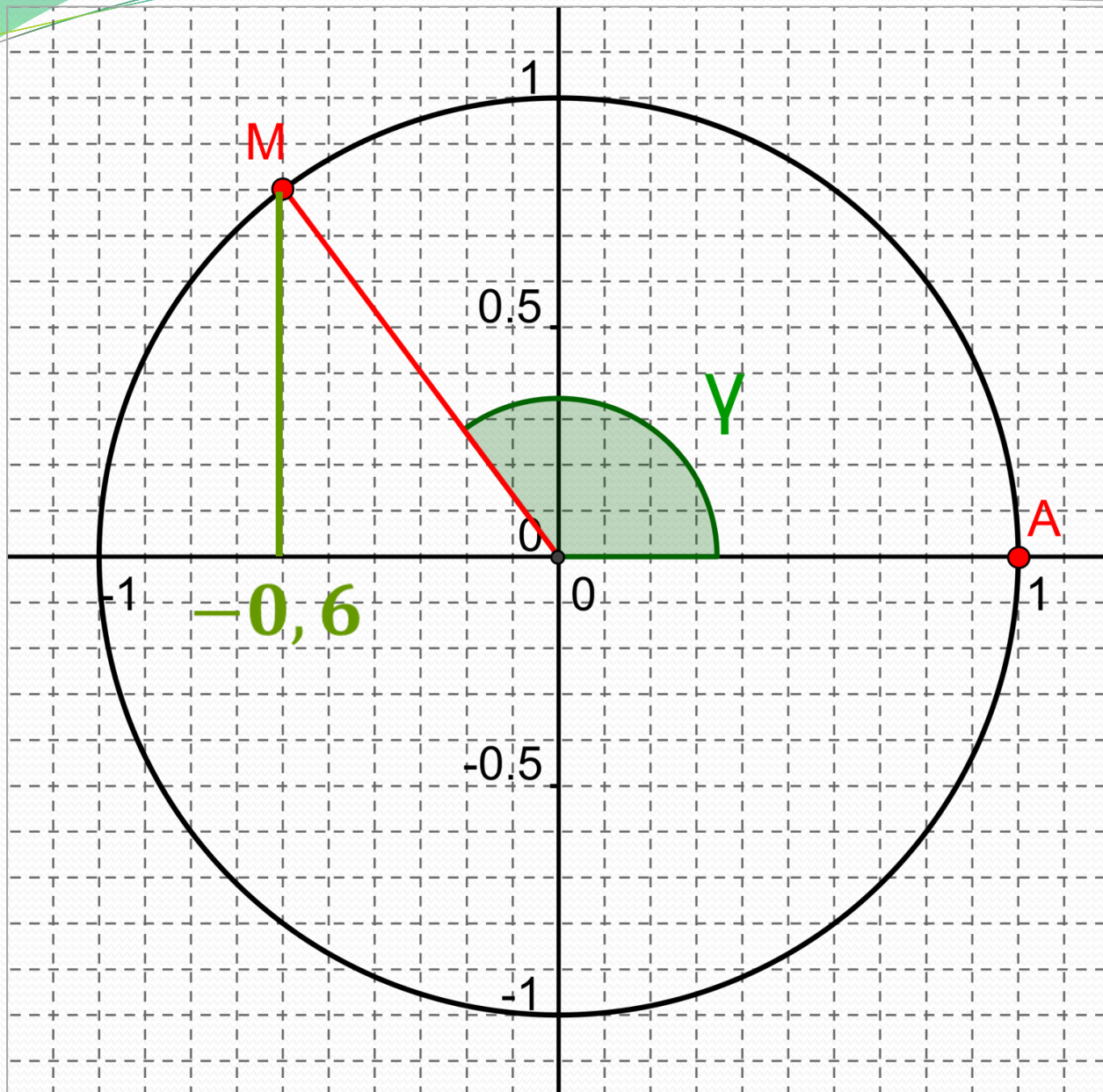
$$\sin \beta = 1$$



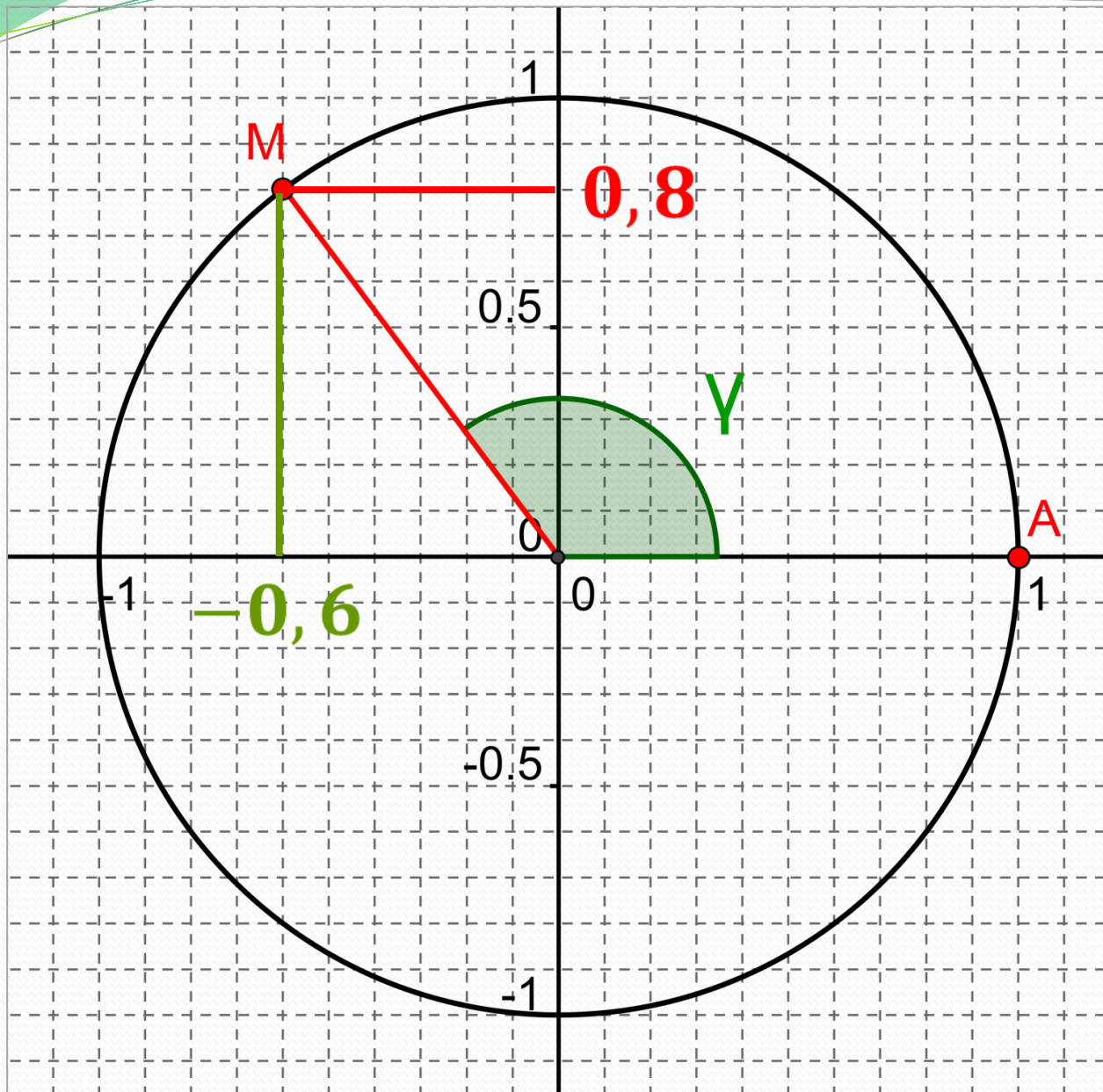
## Question 2



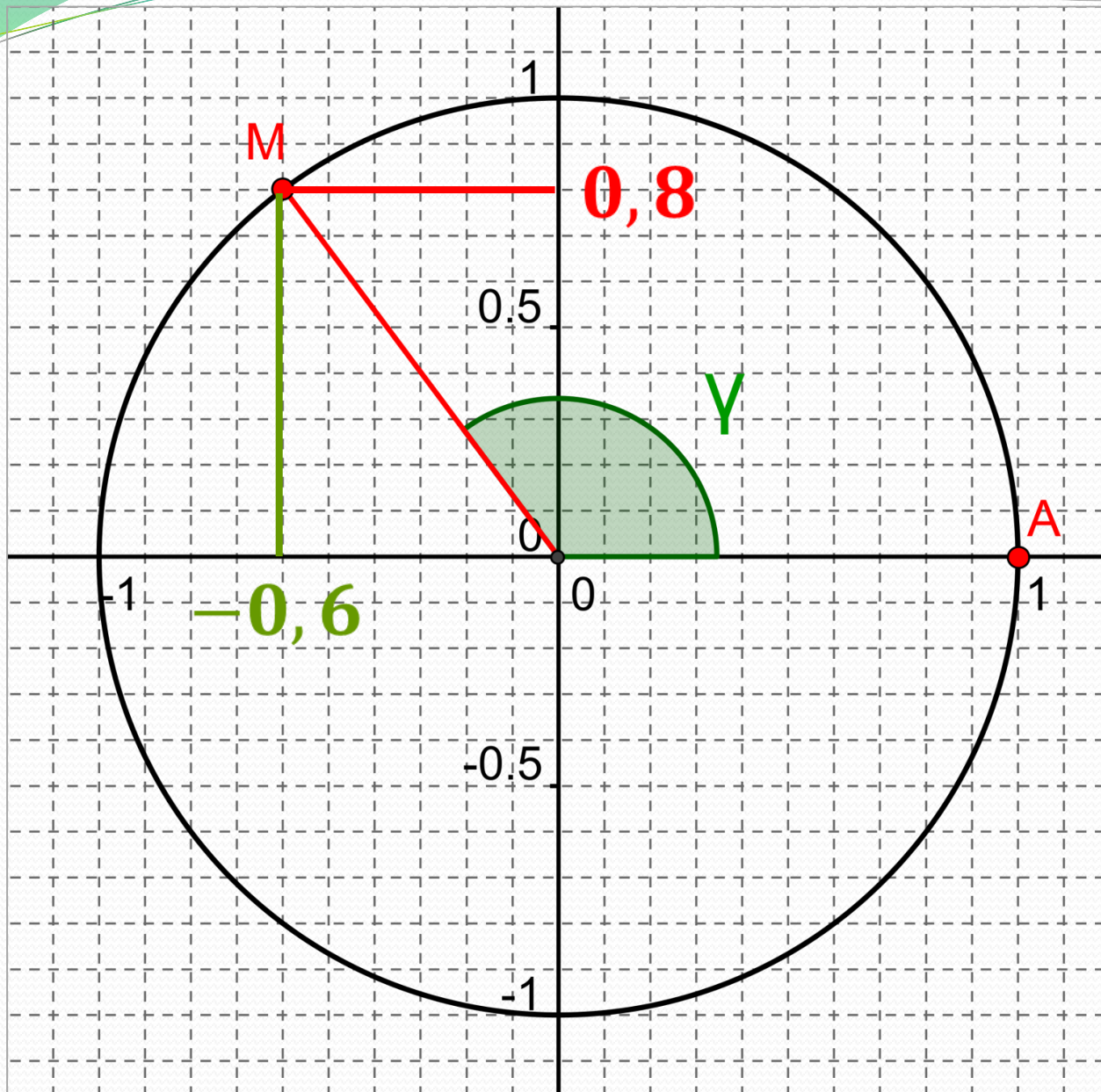
## Question 2



## Question 2



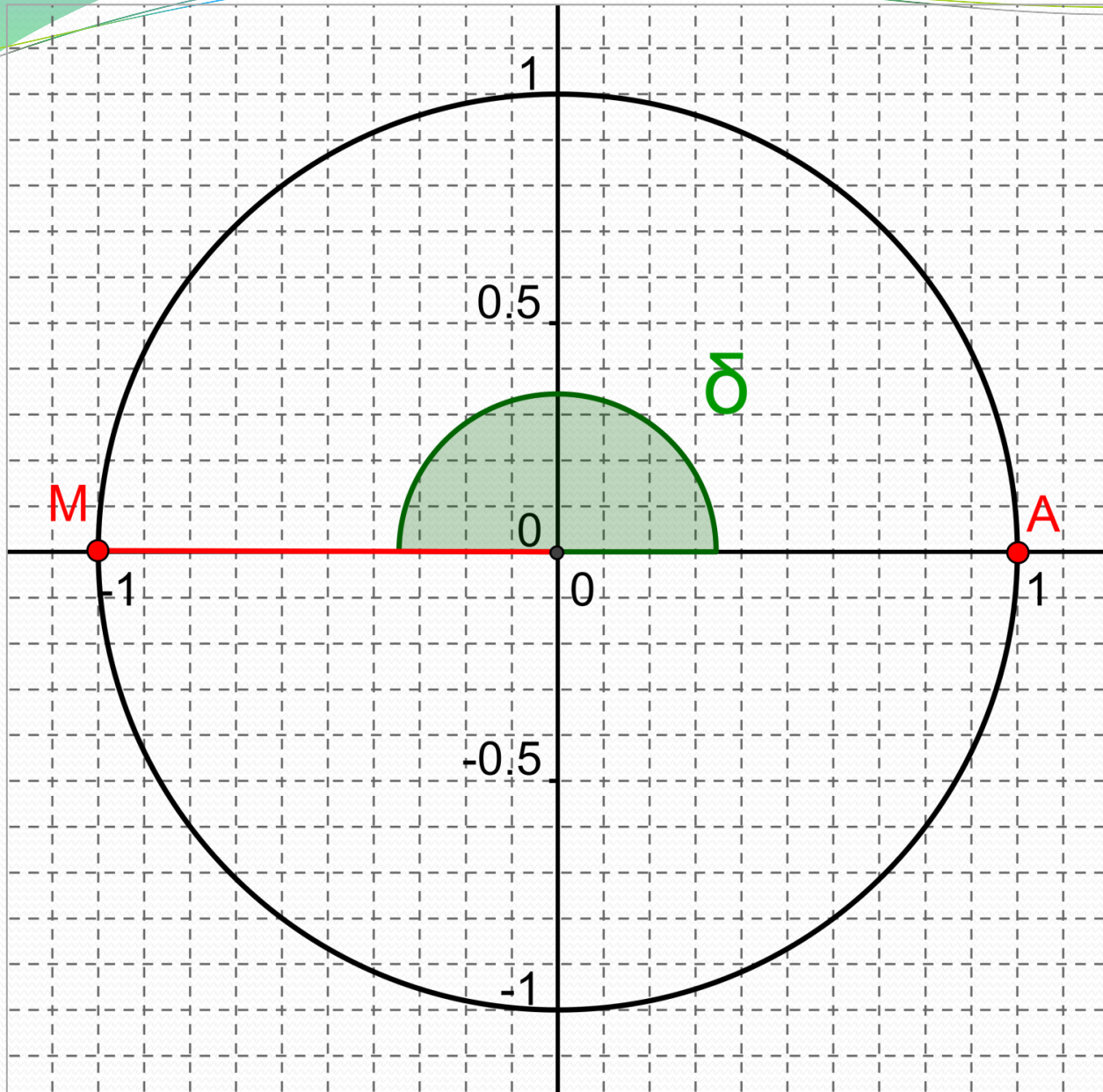
## Question 2



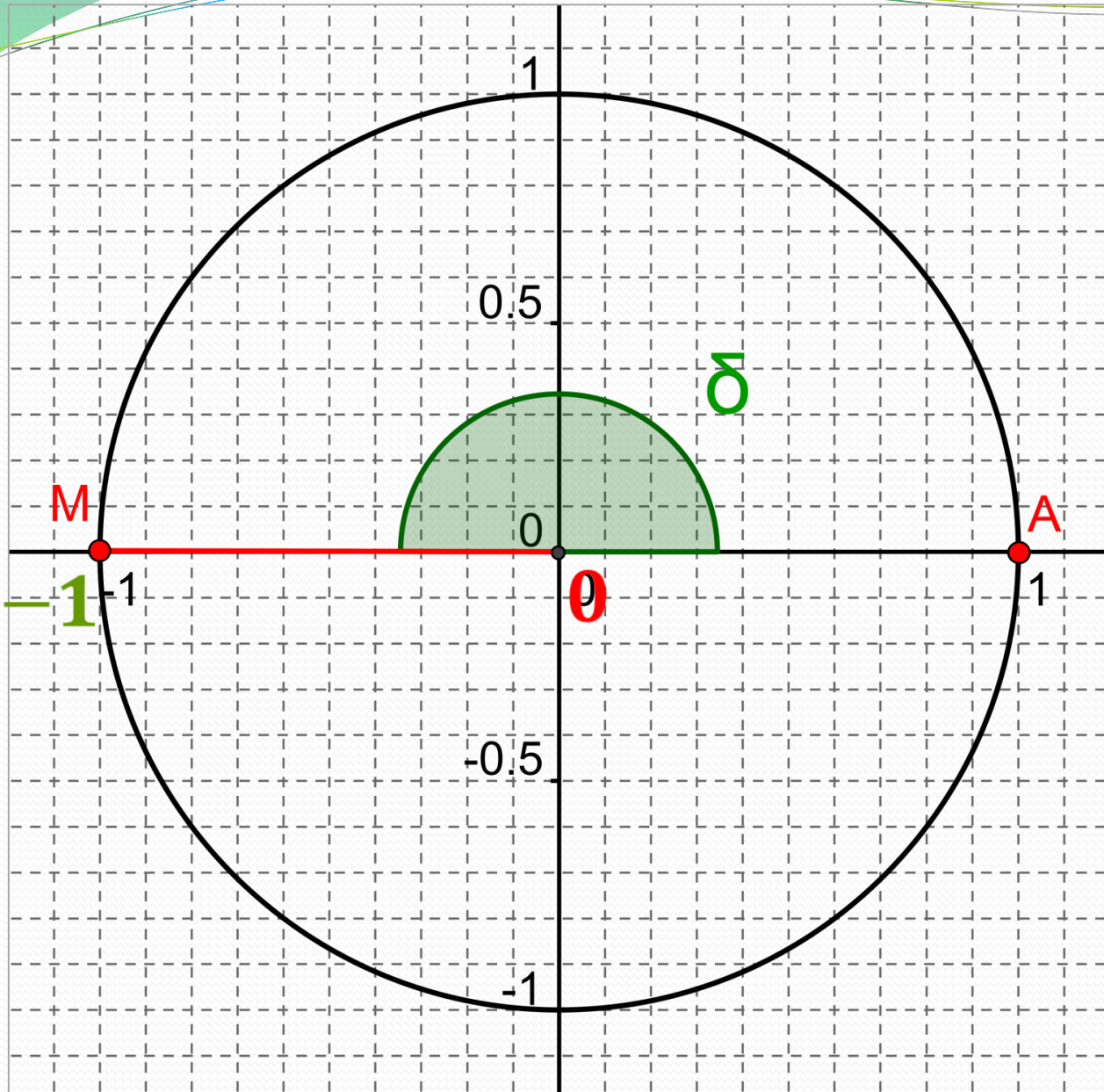
$$\cos \gamma \approx -0,6$$

$$\sin \gamma \approx 0,8$$

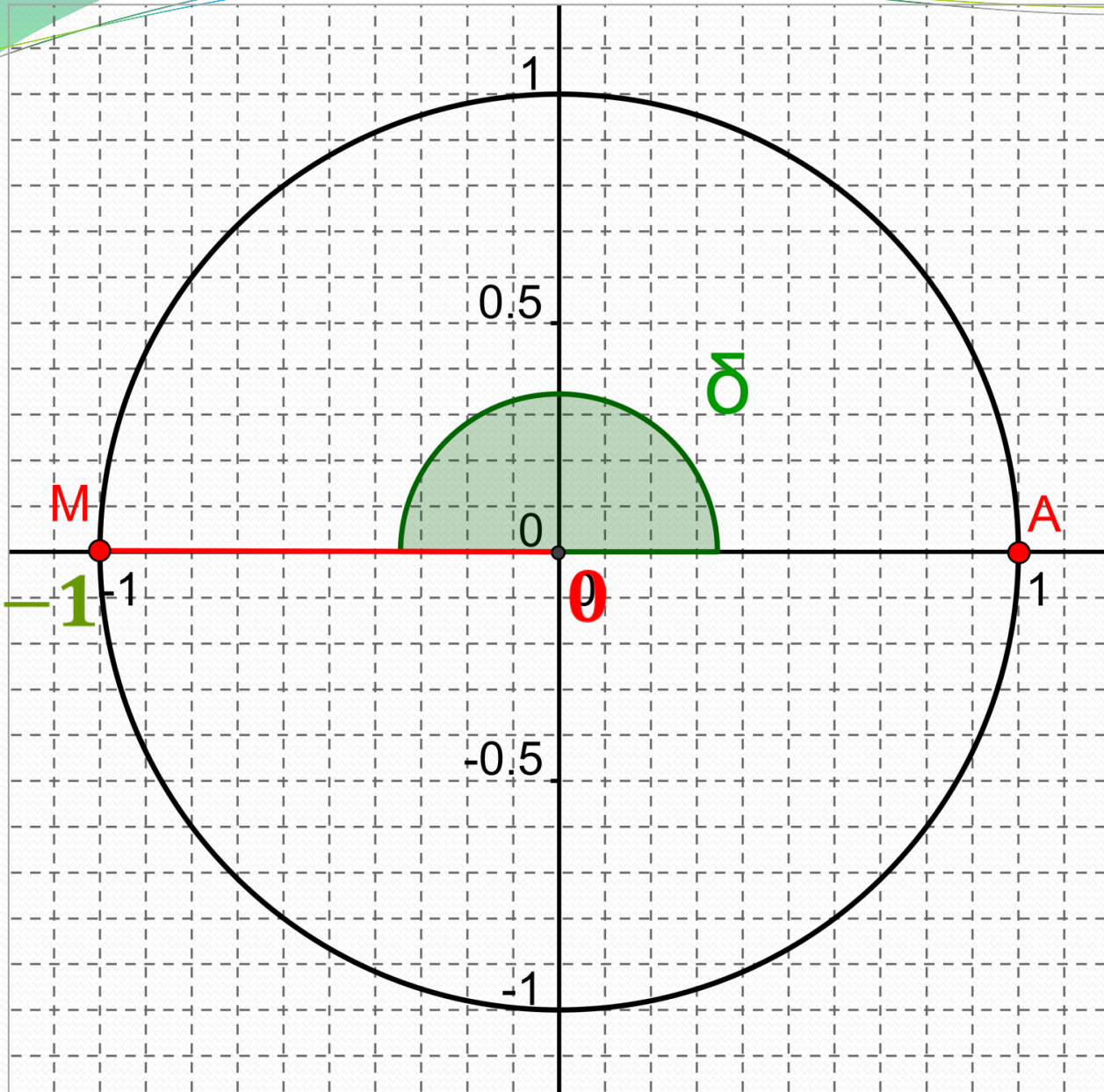
## Question 3



## Question 3



## Question 3

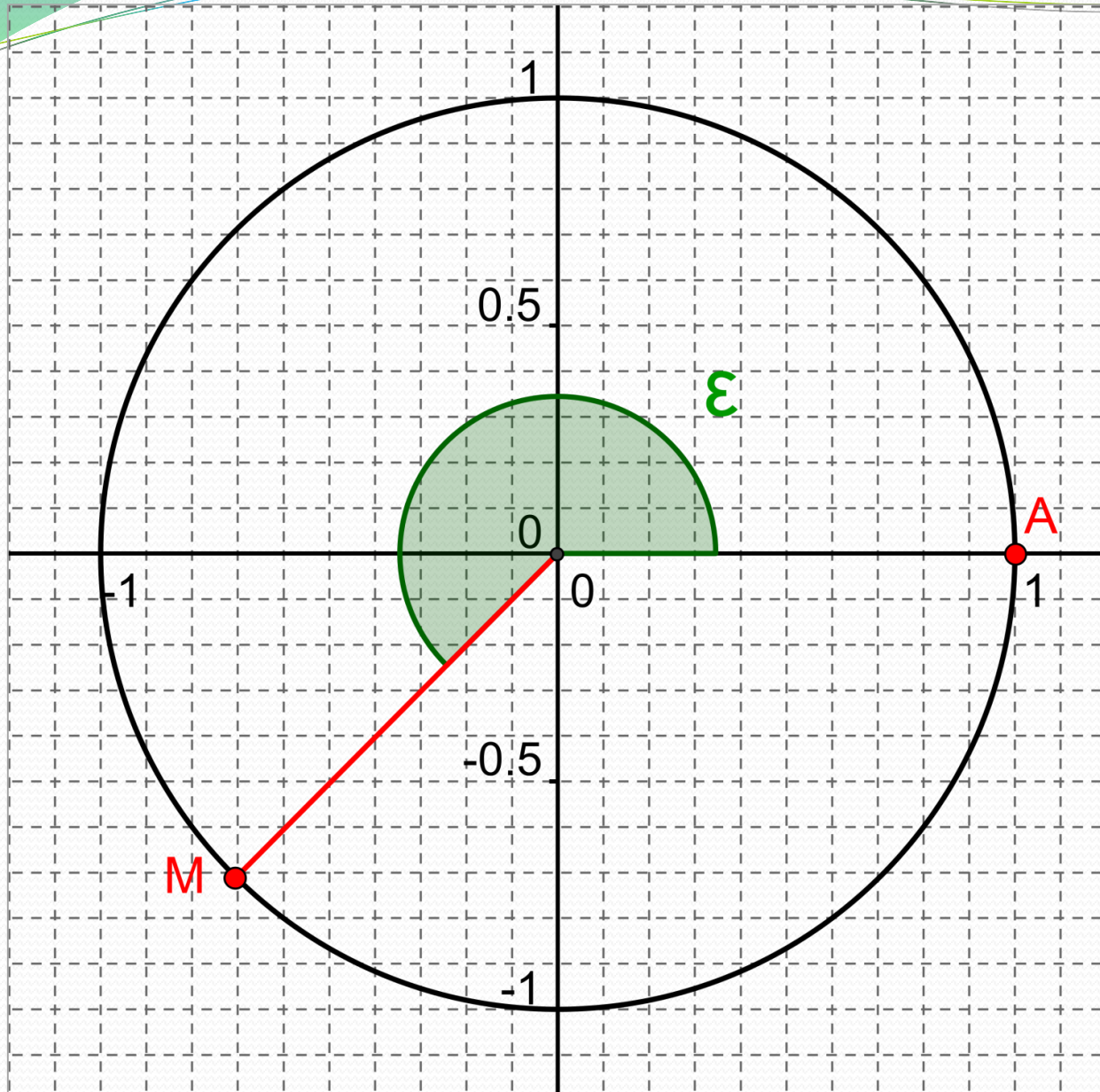


$$\cos \delta = -1$$

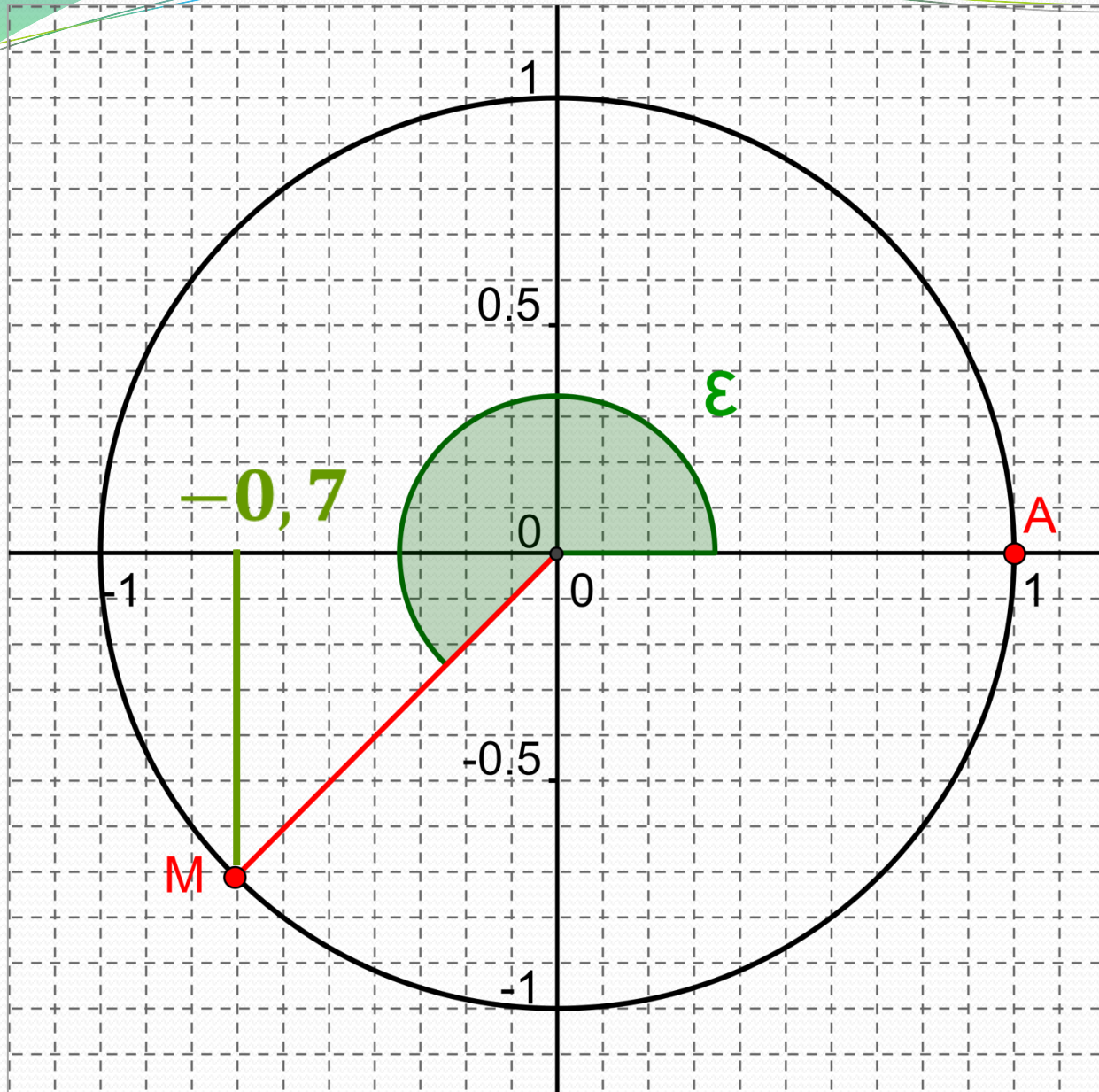
$$\sin \delta = 0$$



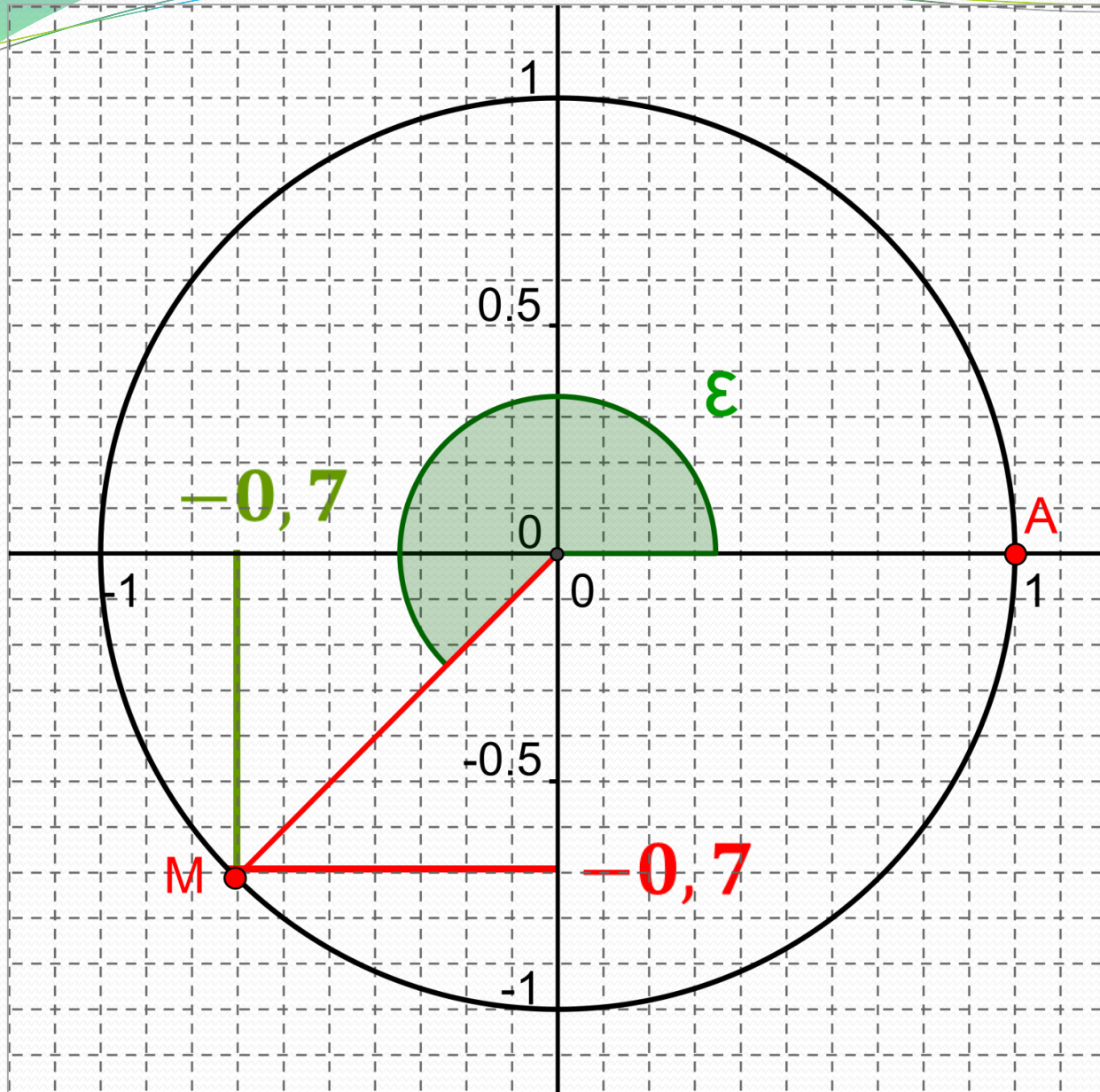
## Question 4



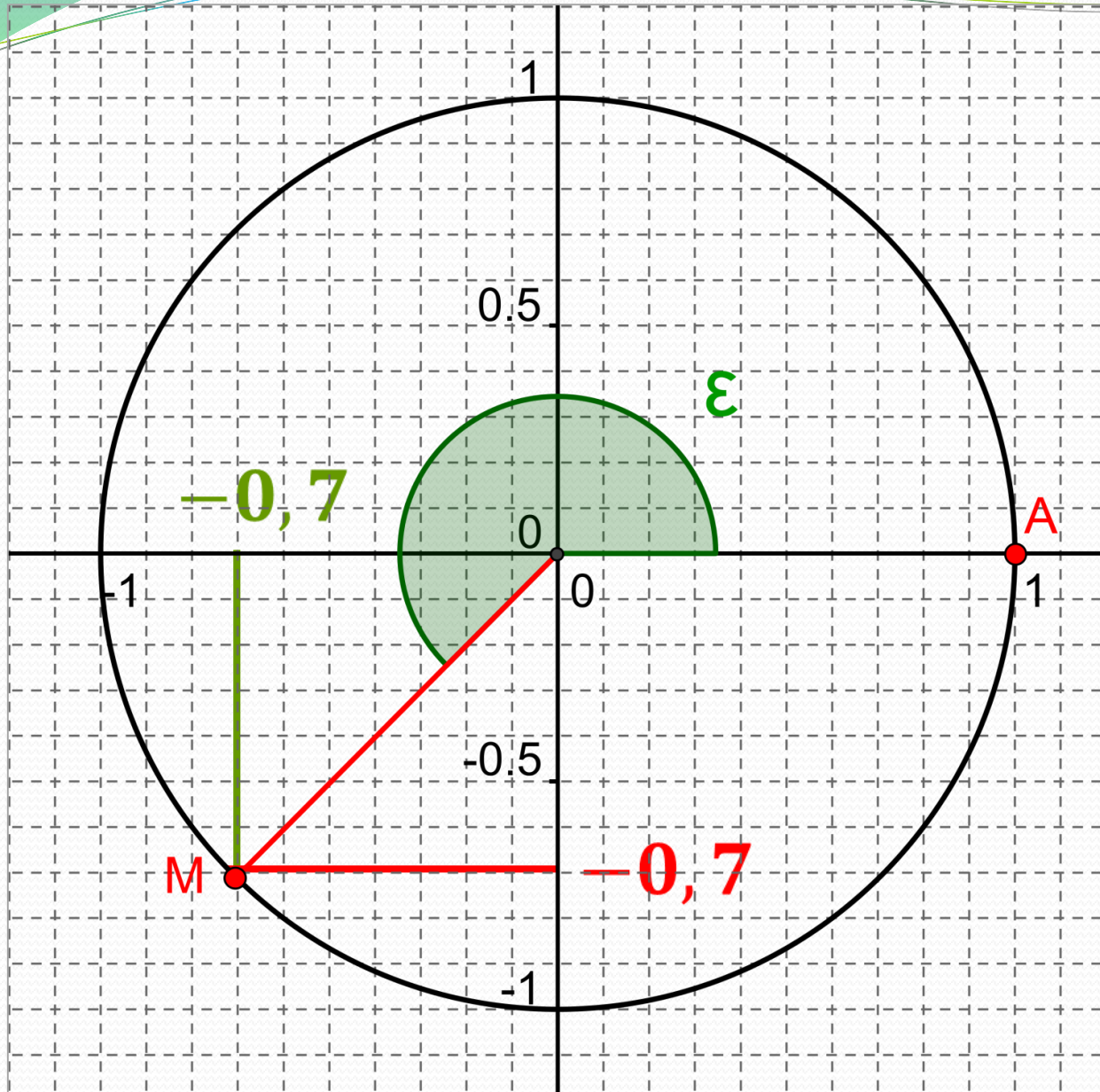
## Question 4



## Question 4



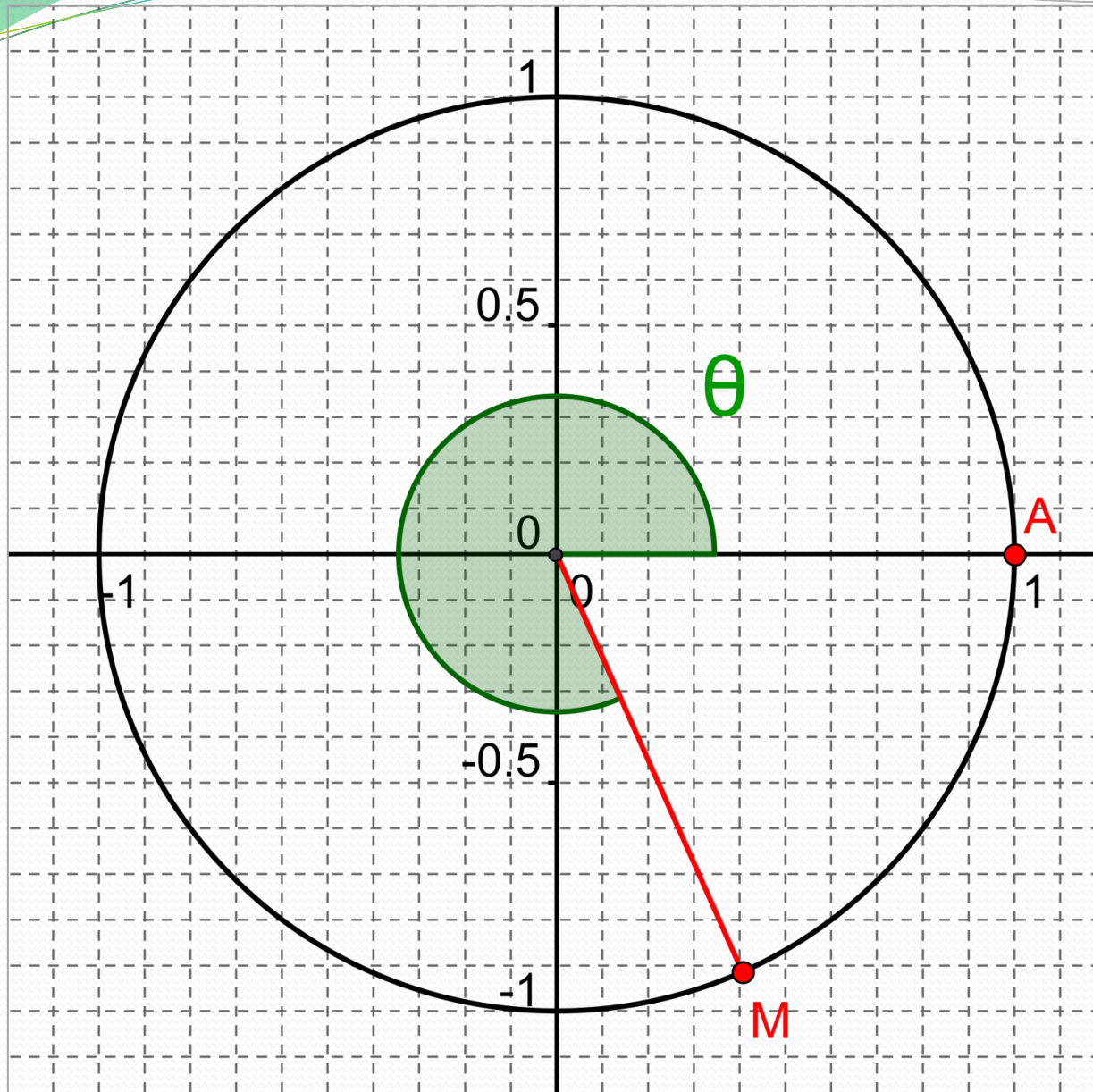
## Question 4



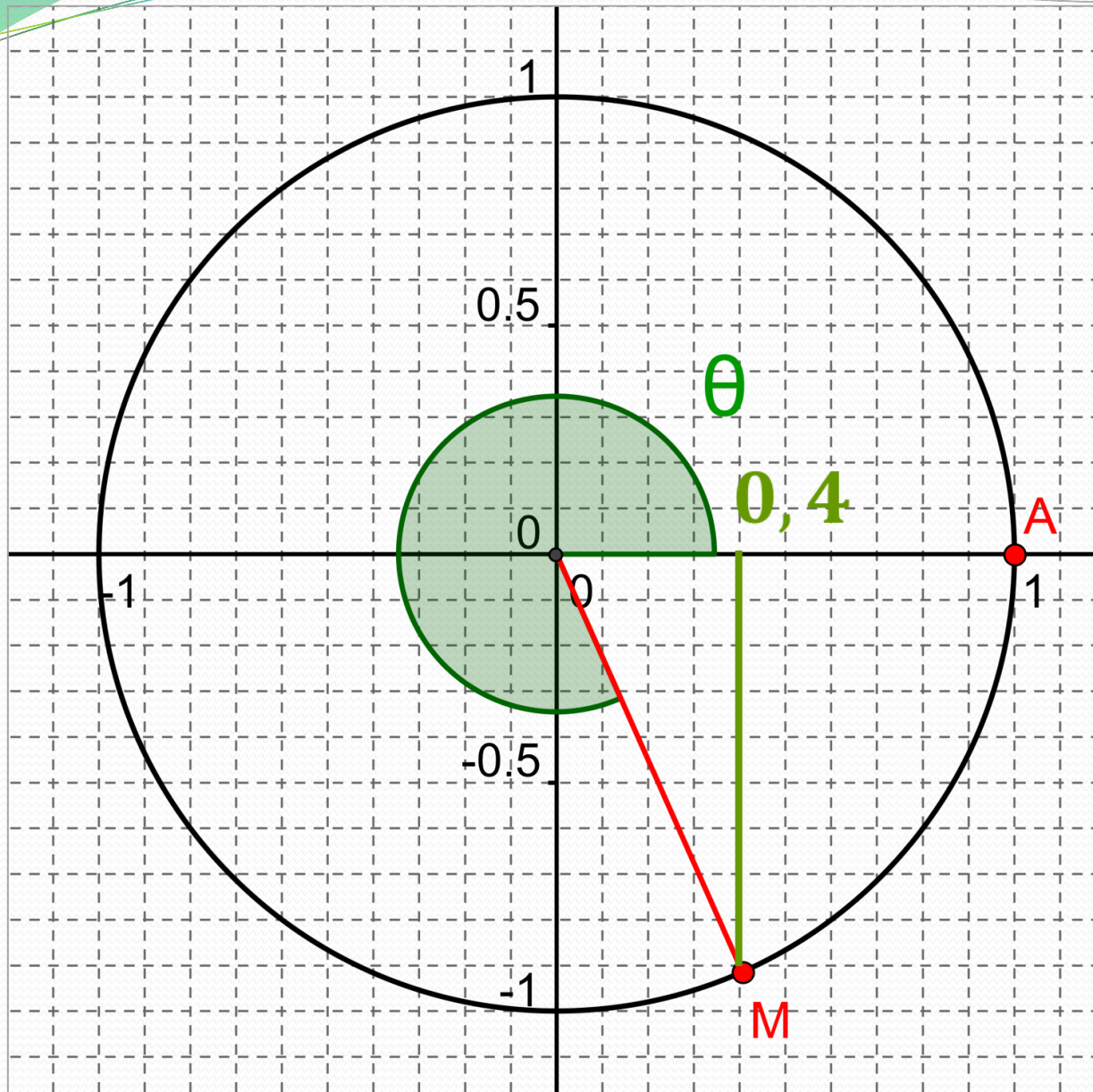
$$\cos \epsilon \approx -0,7$$

$$\sin \epsilon \approx -0,7$$

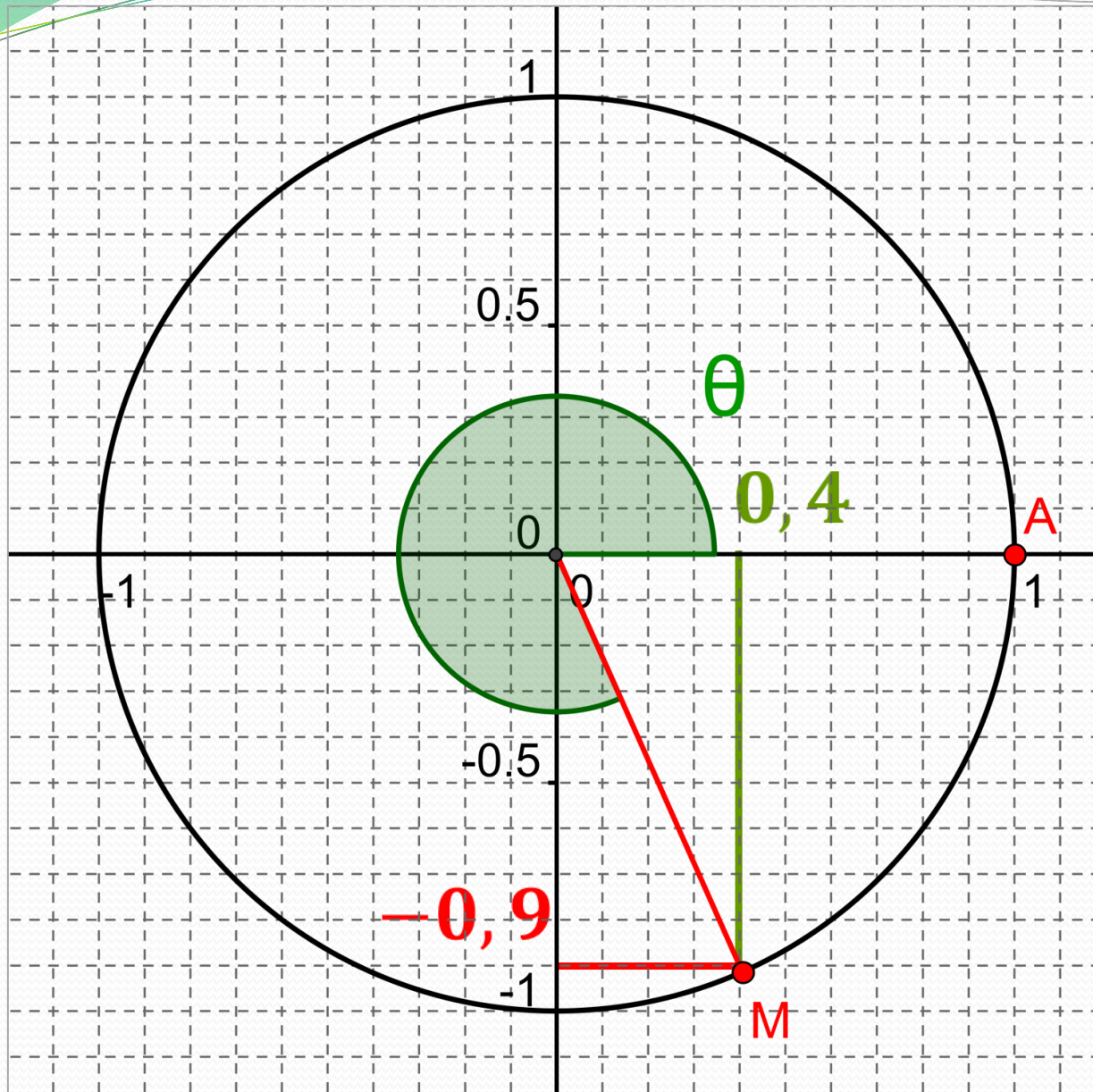
## Question 5



## Question 5

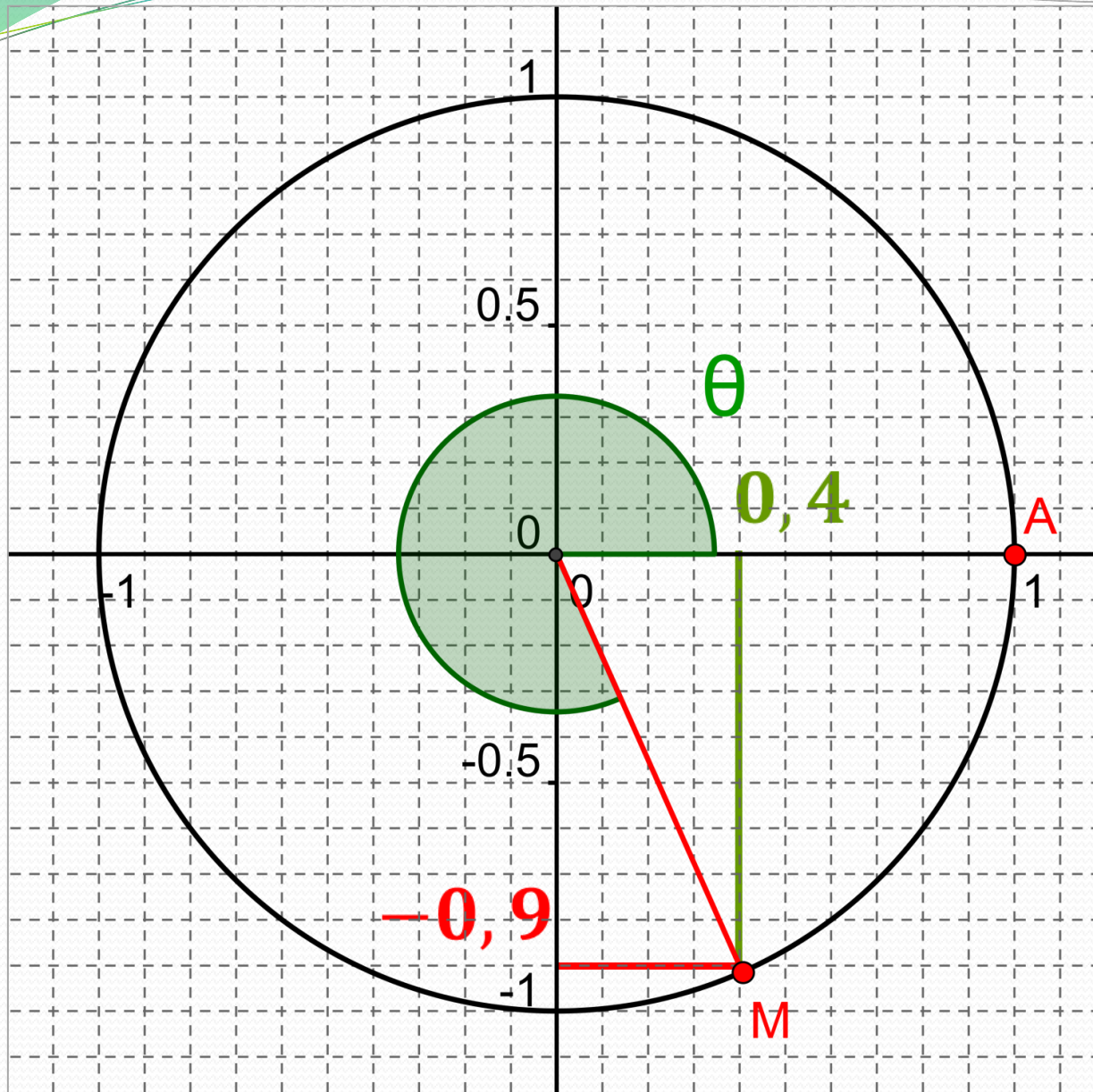


## Question 5



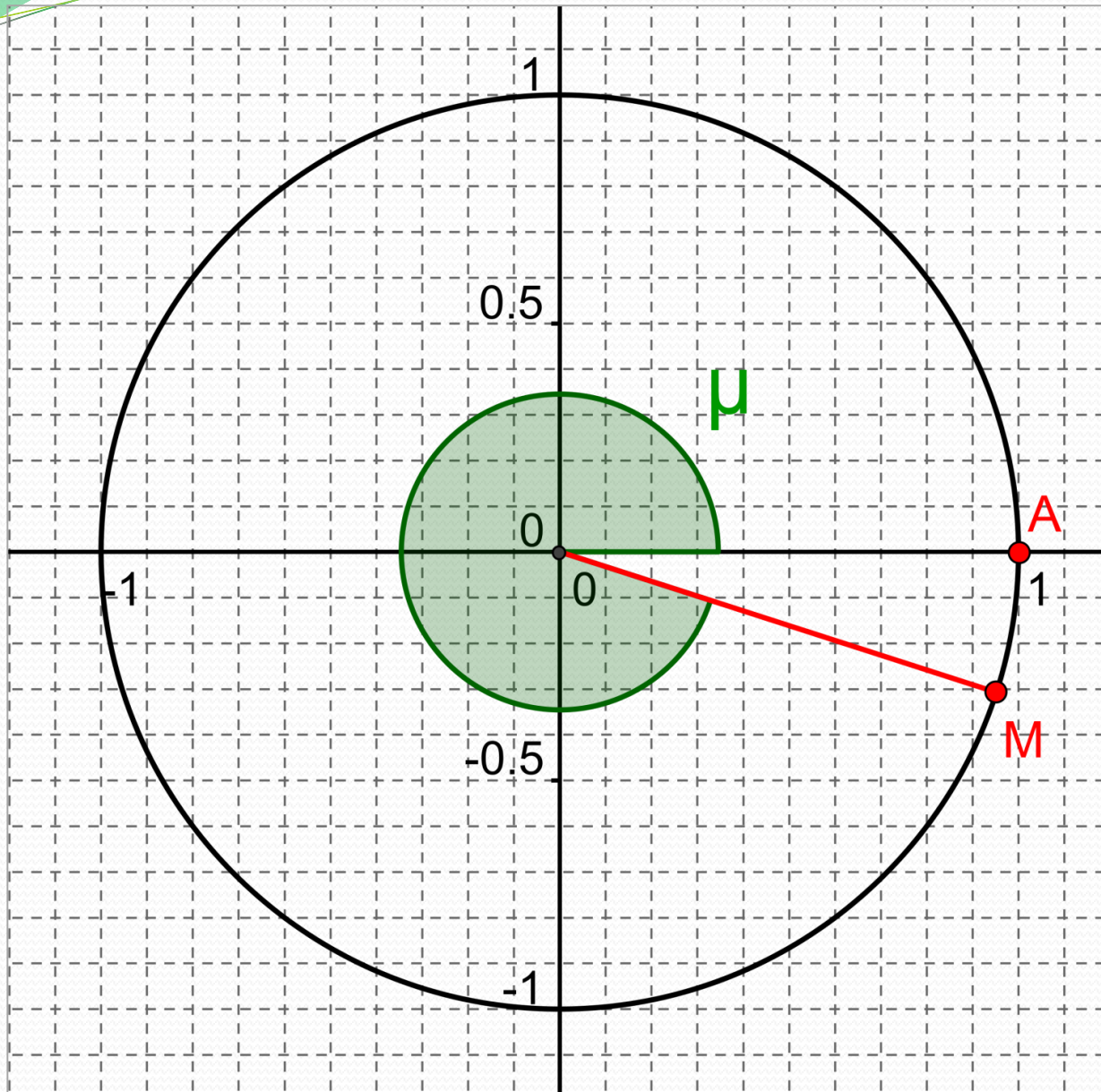


## Question 5

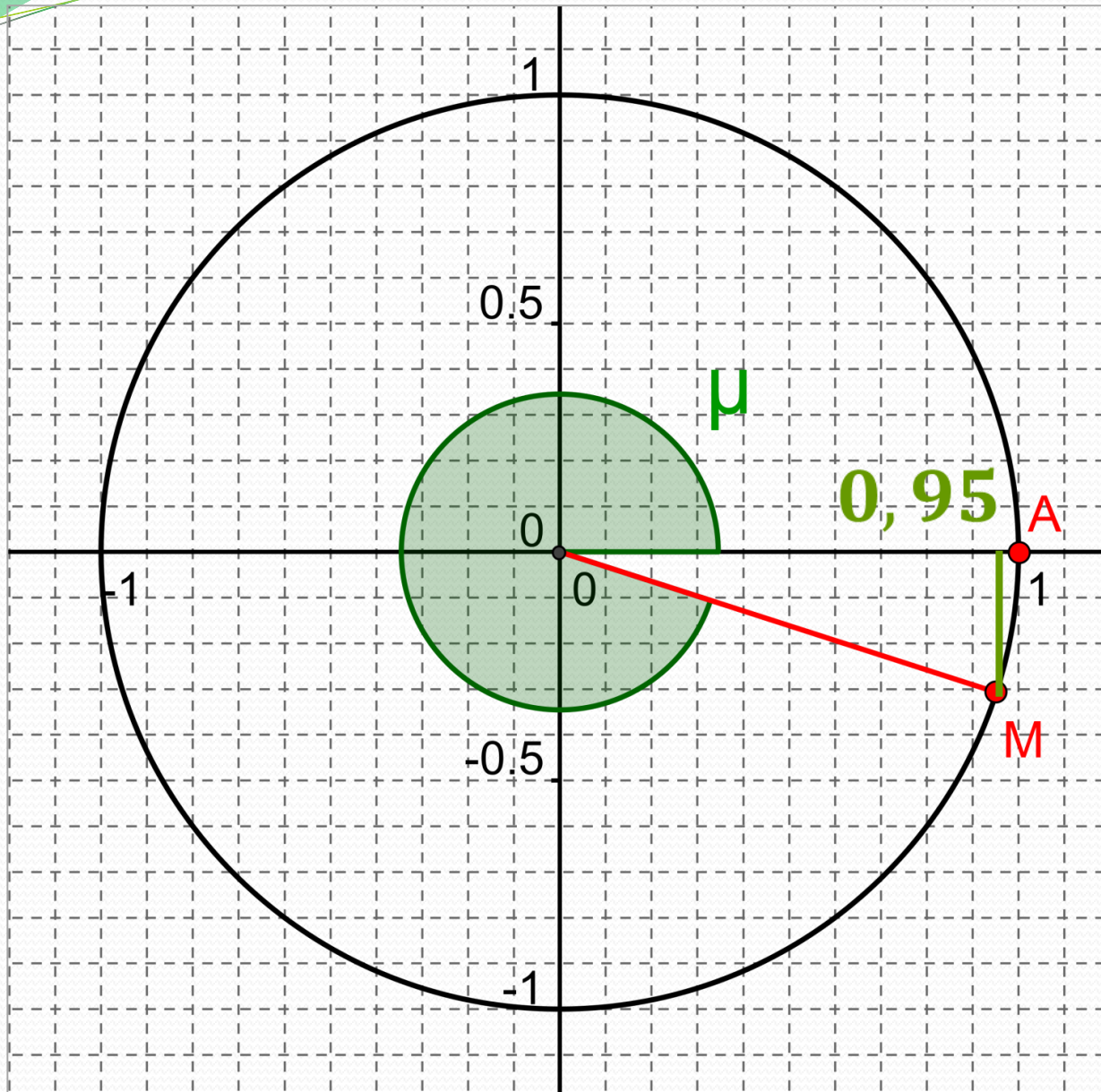


$$\cos \theta \approx 0,4$$
$$\sin \theta \approx -0,9$$

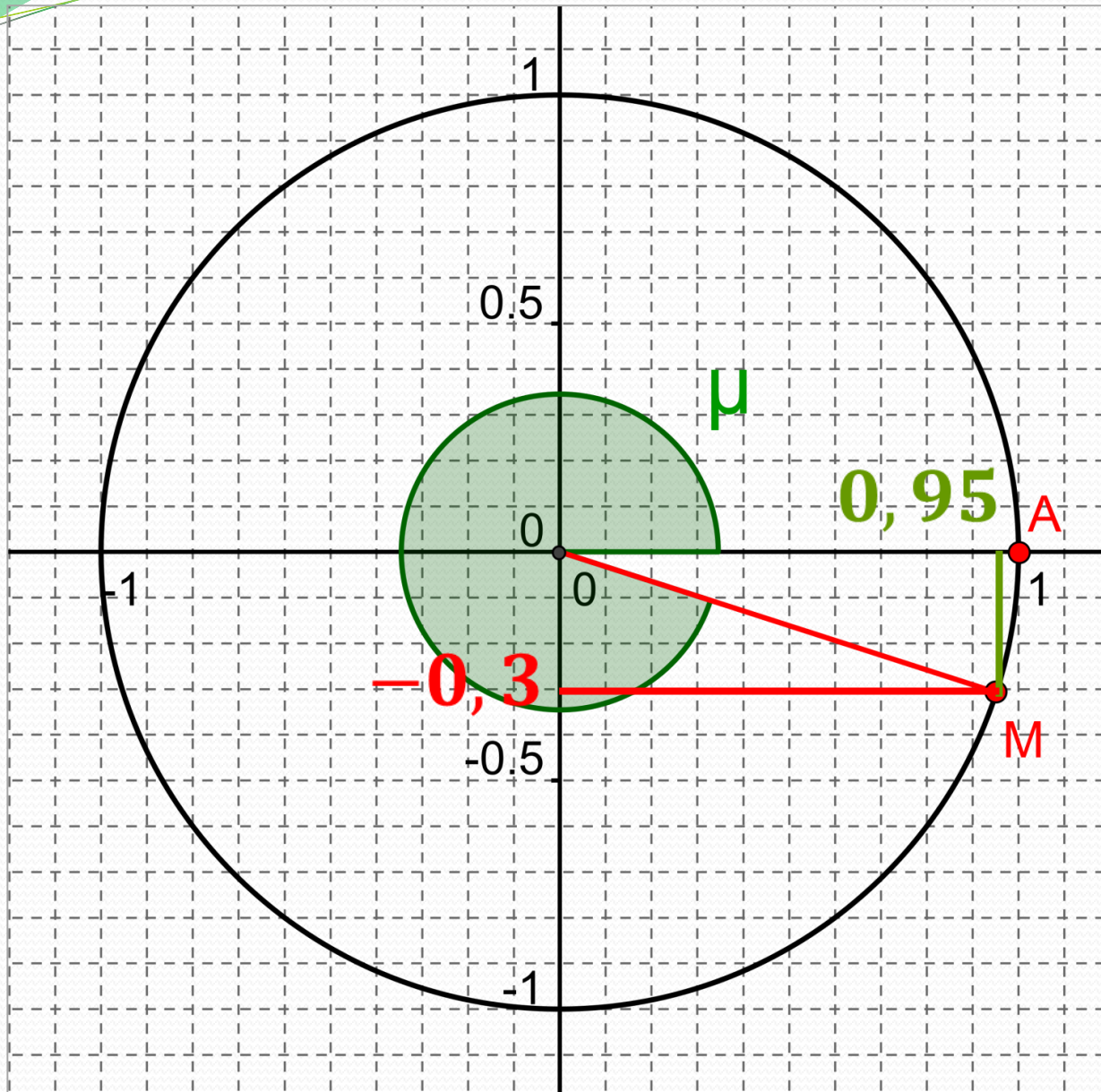
## Question 6



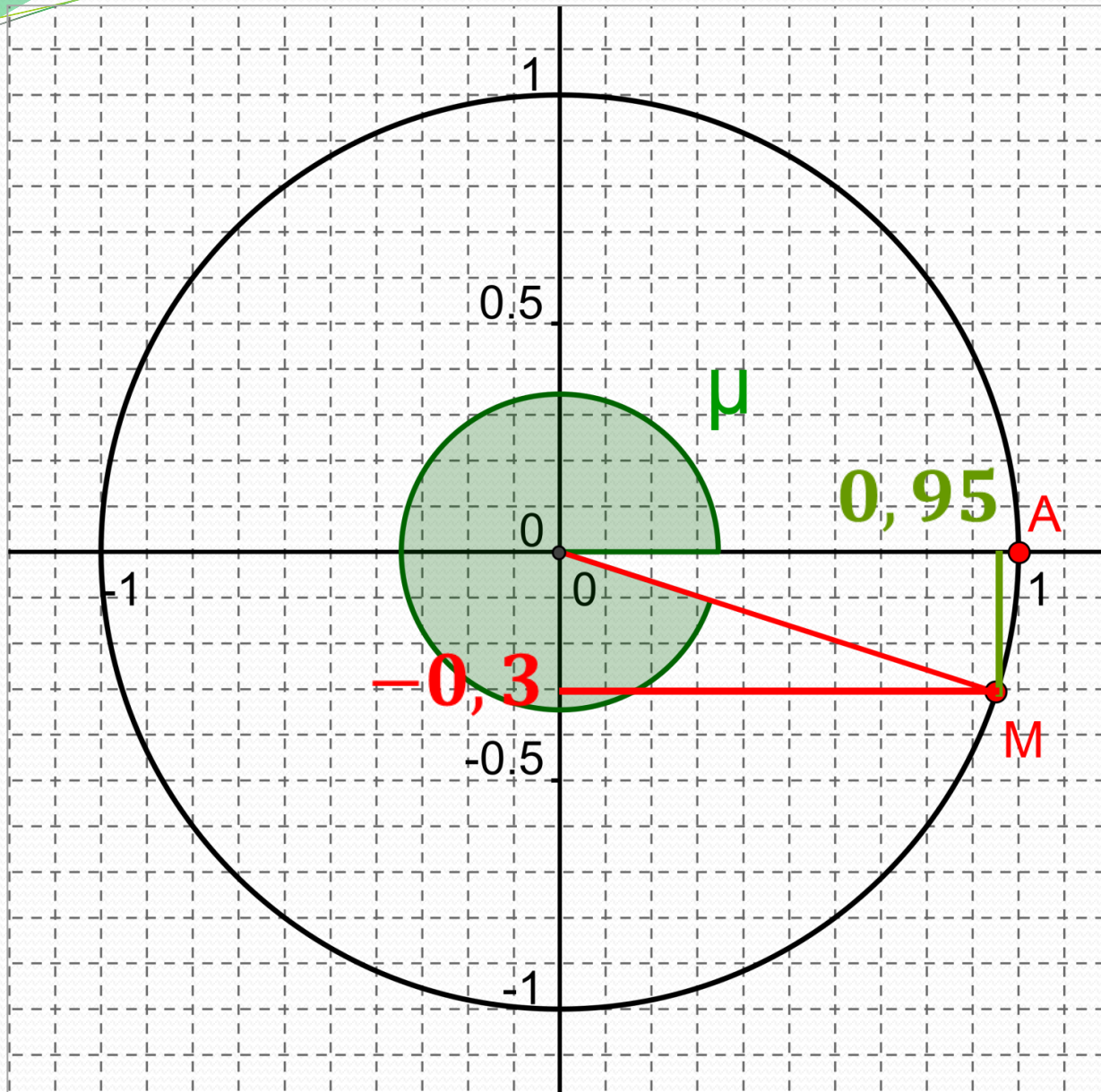
## Question 6



## Question 6



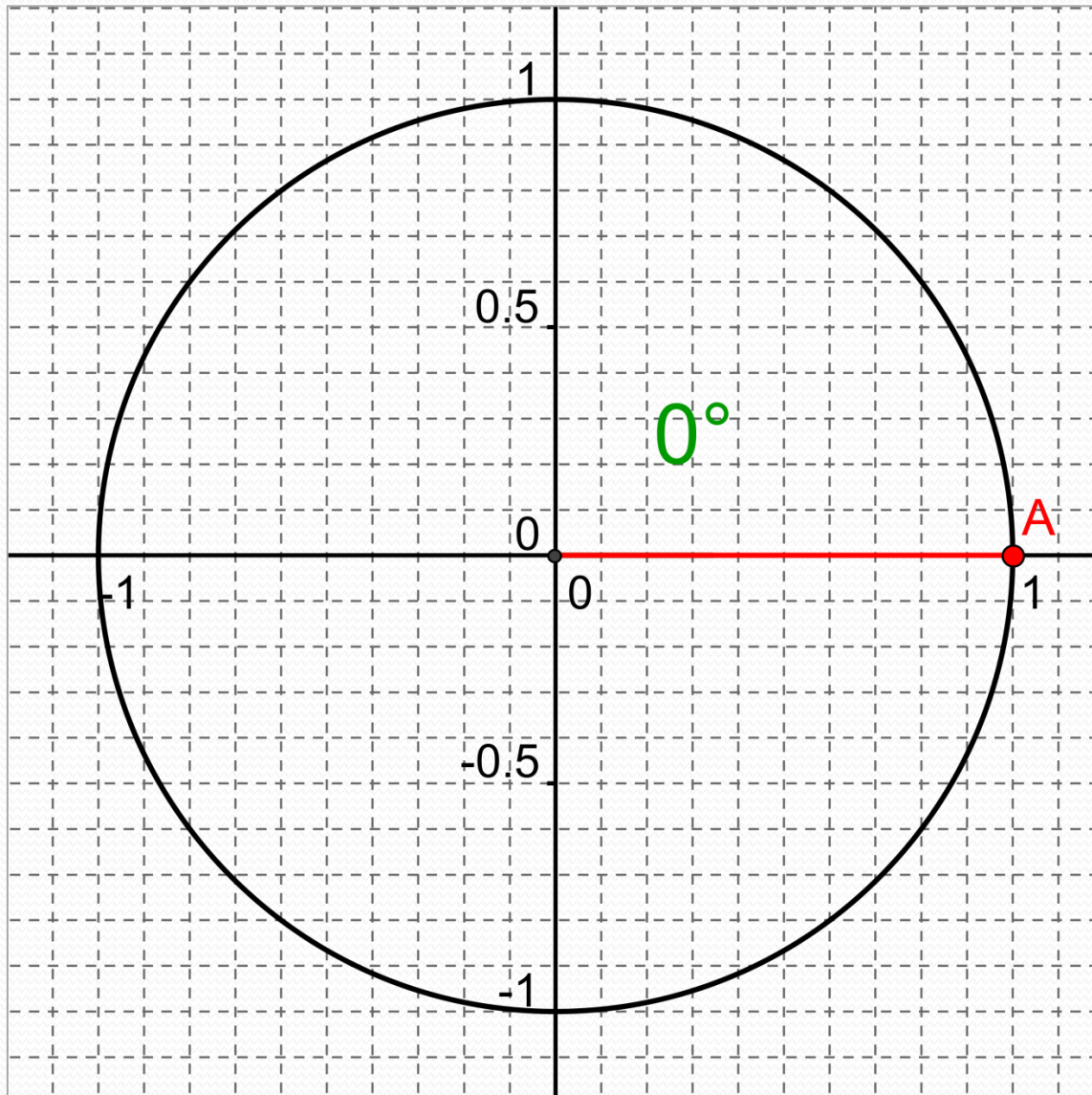
## Question 6



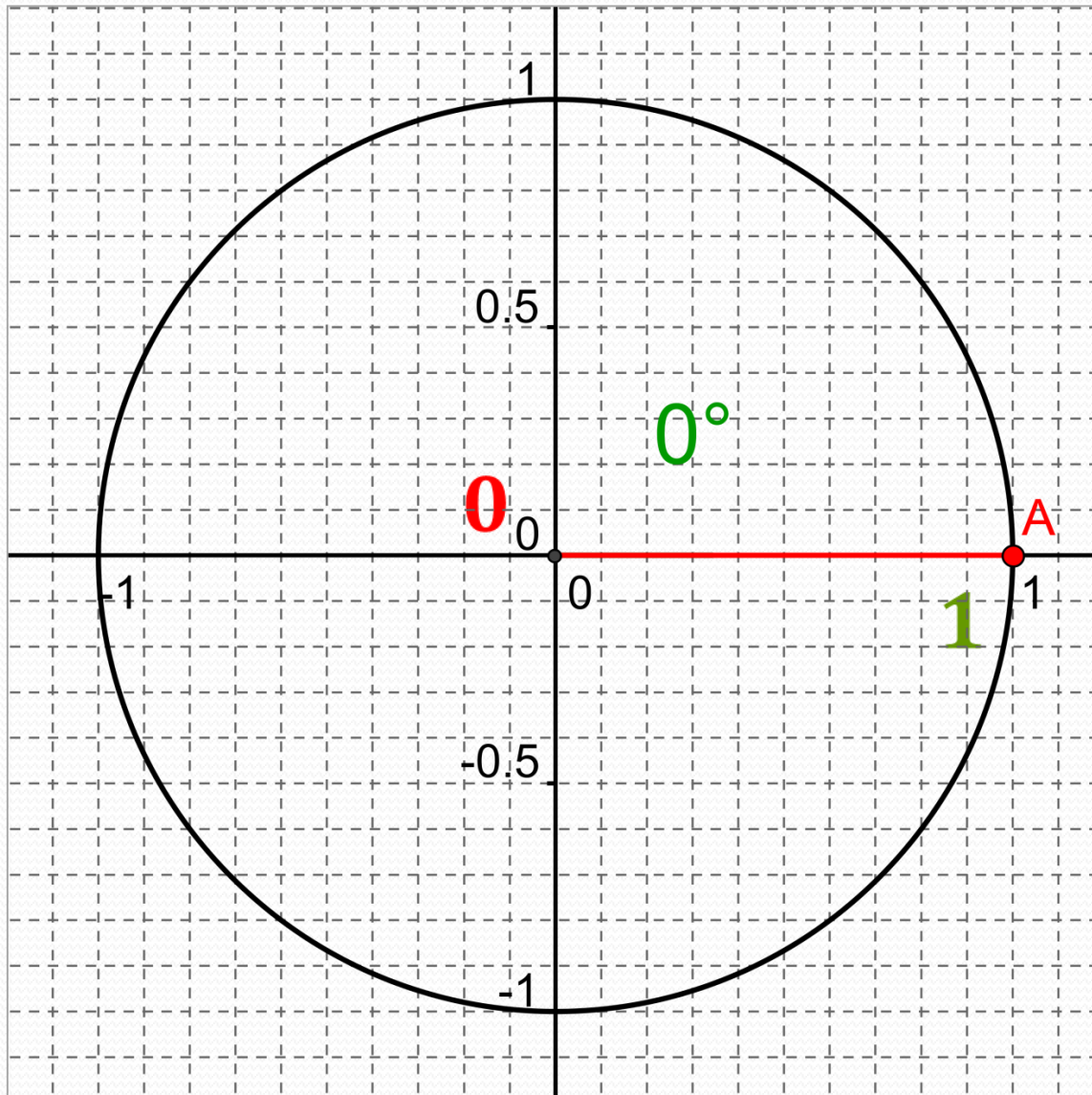
$$\cos \mu \approx 0,95$$

$$\sin \mu \approx -0,3$$

## Question 7

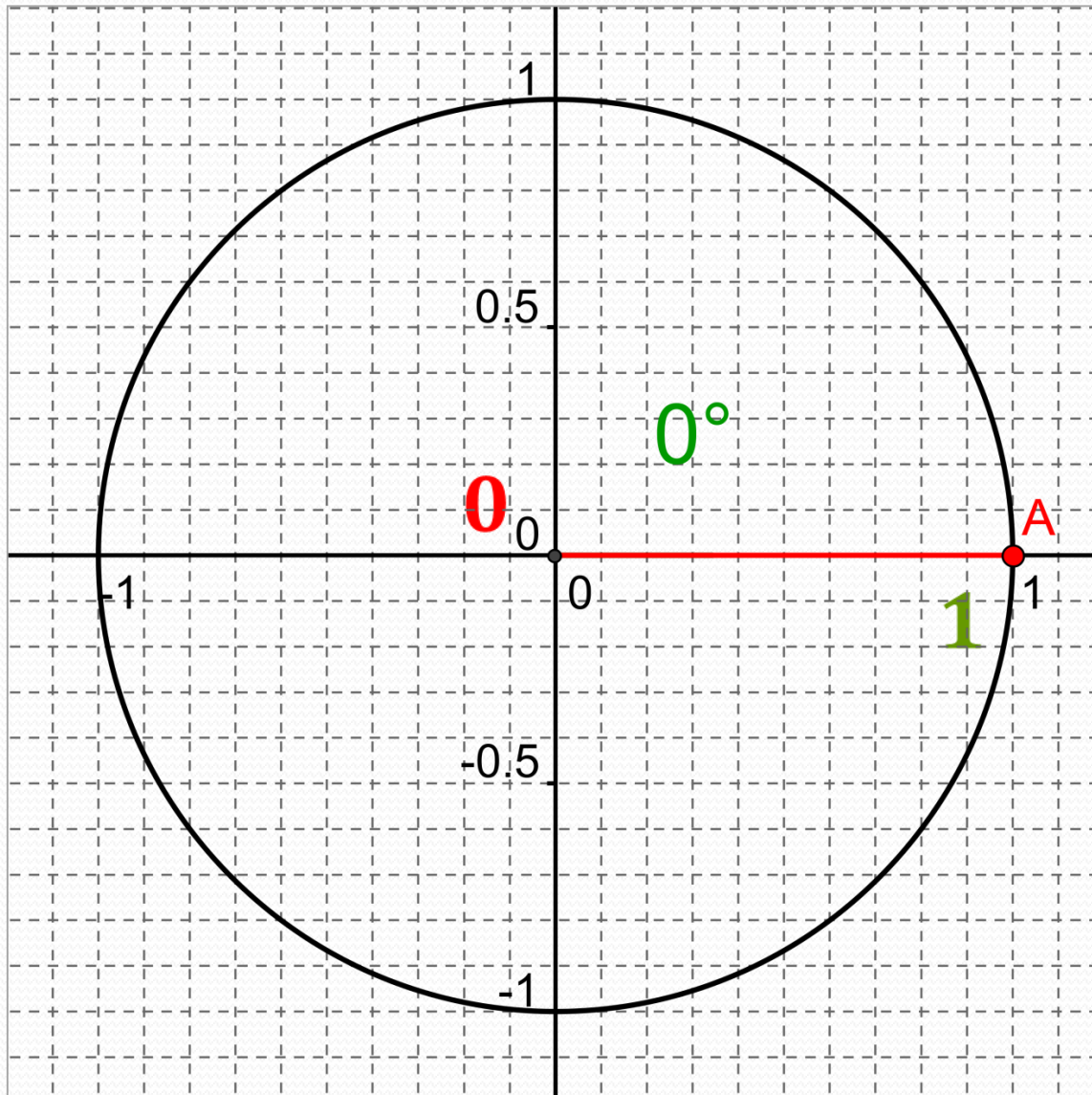


## Question 7





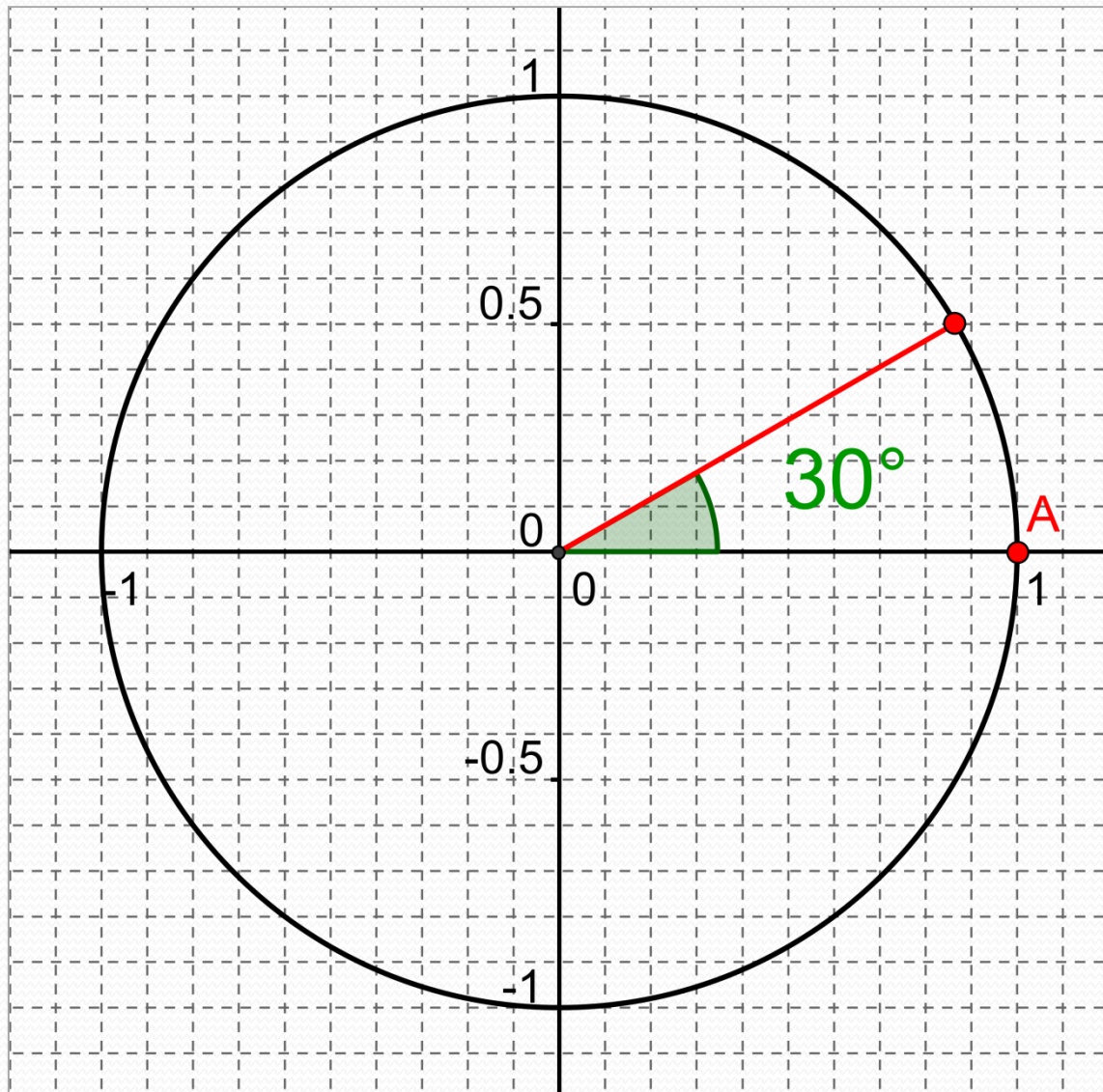
## Question 7



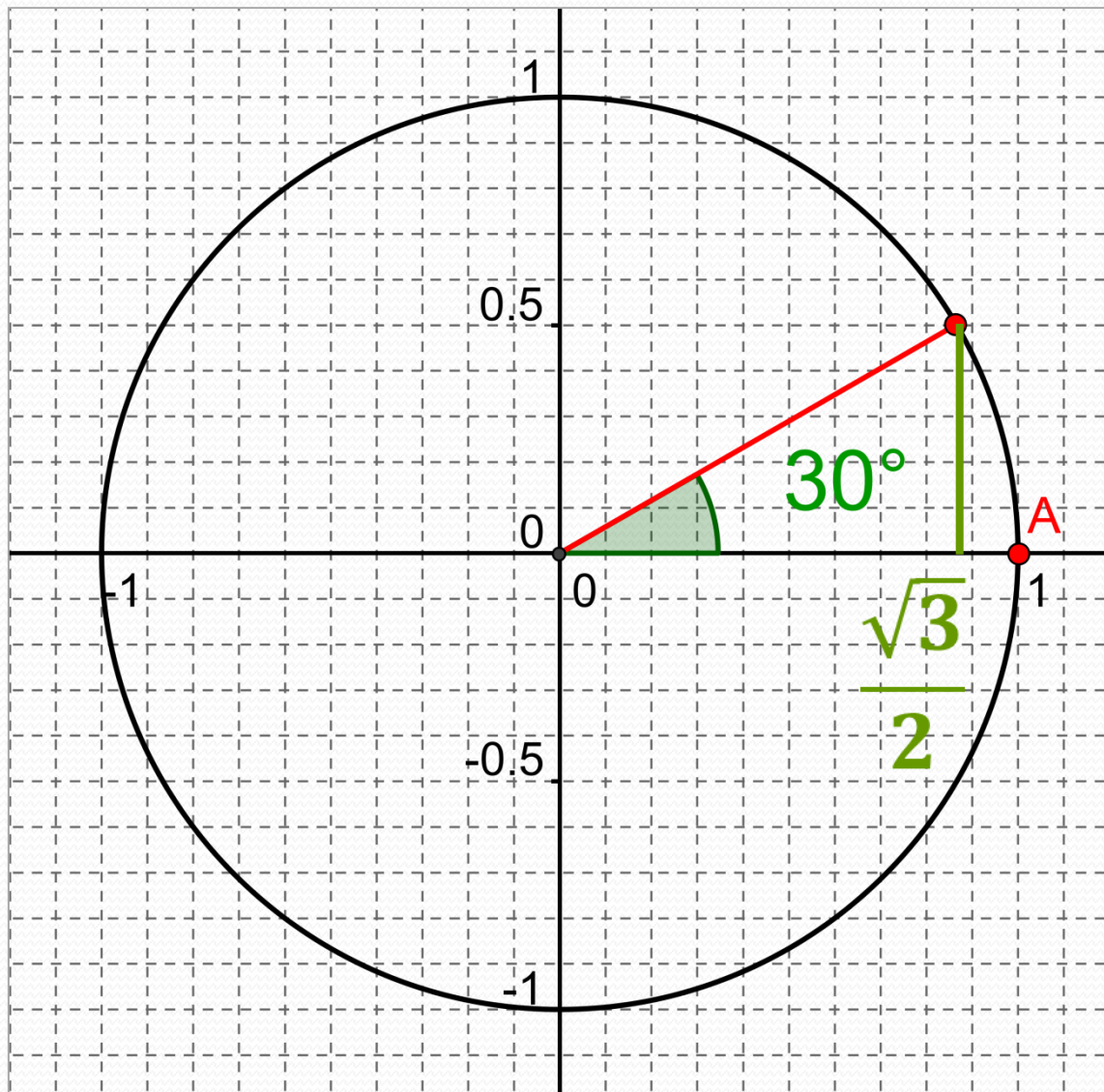
$$\cos 0^\circ = 1$$

$$\sin 0^\circ = 0$$

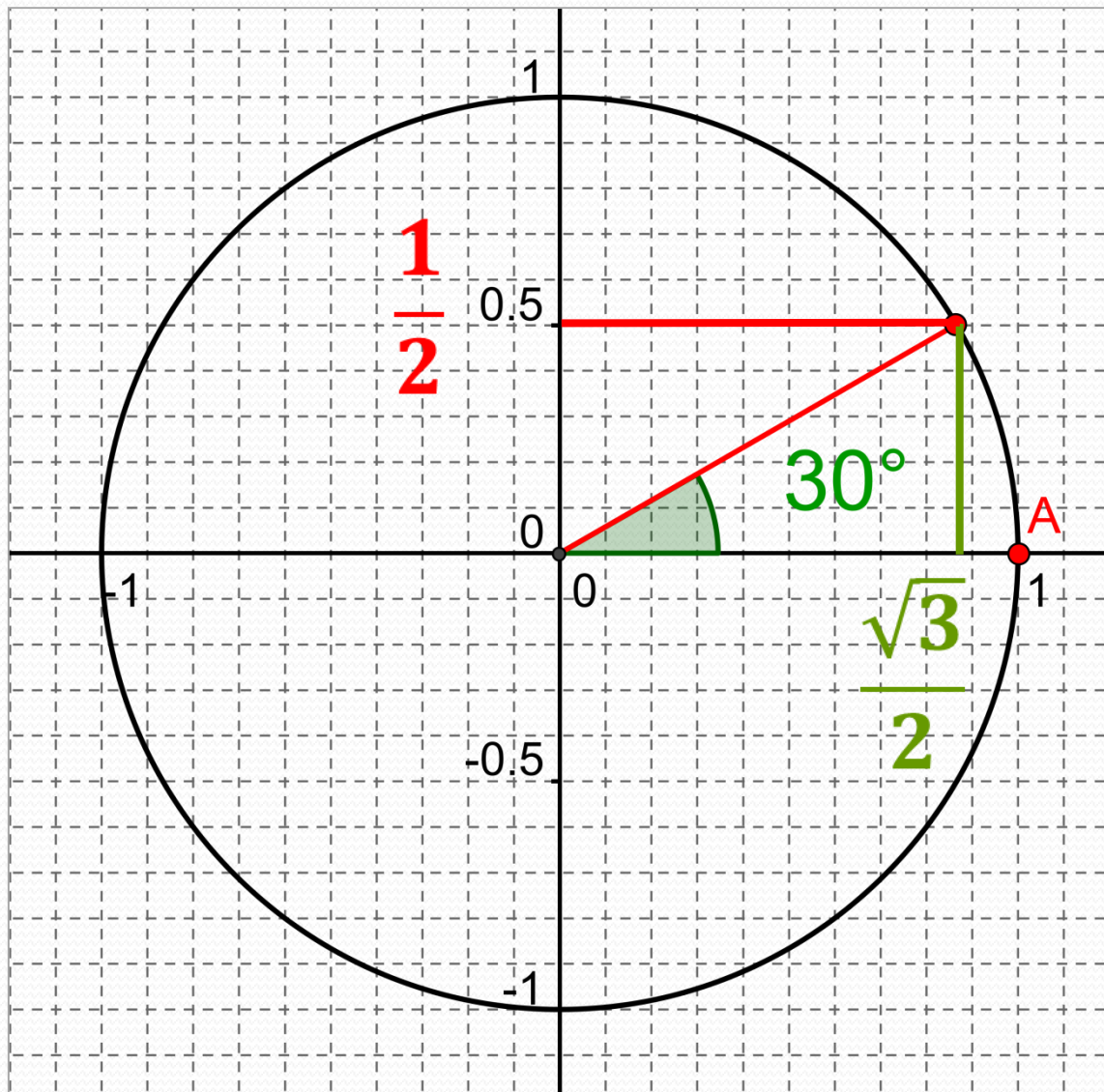
## Question 8



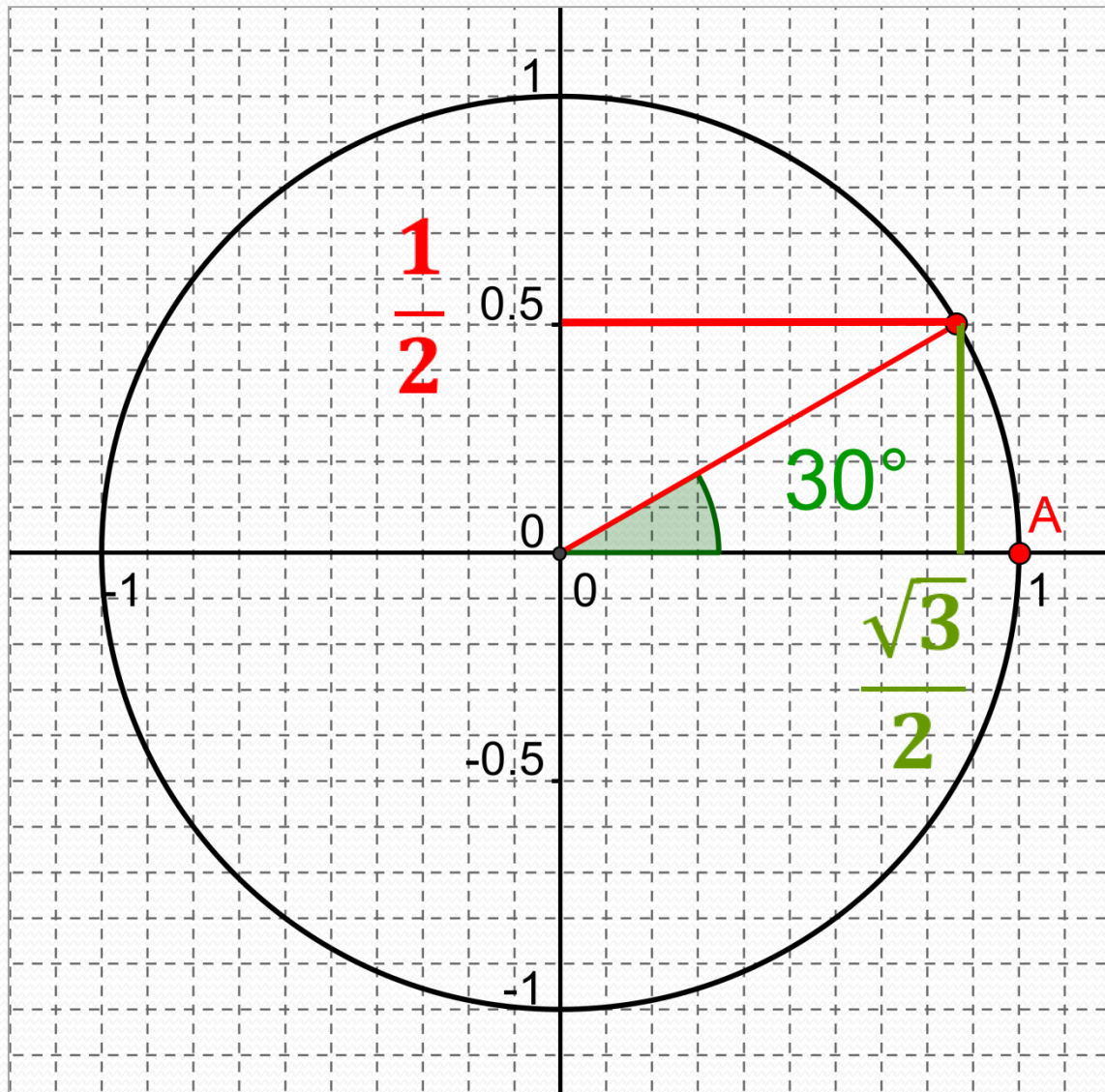
## Question 8



## Question 8

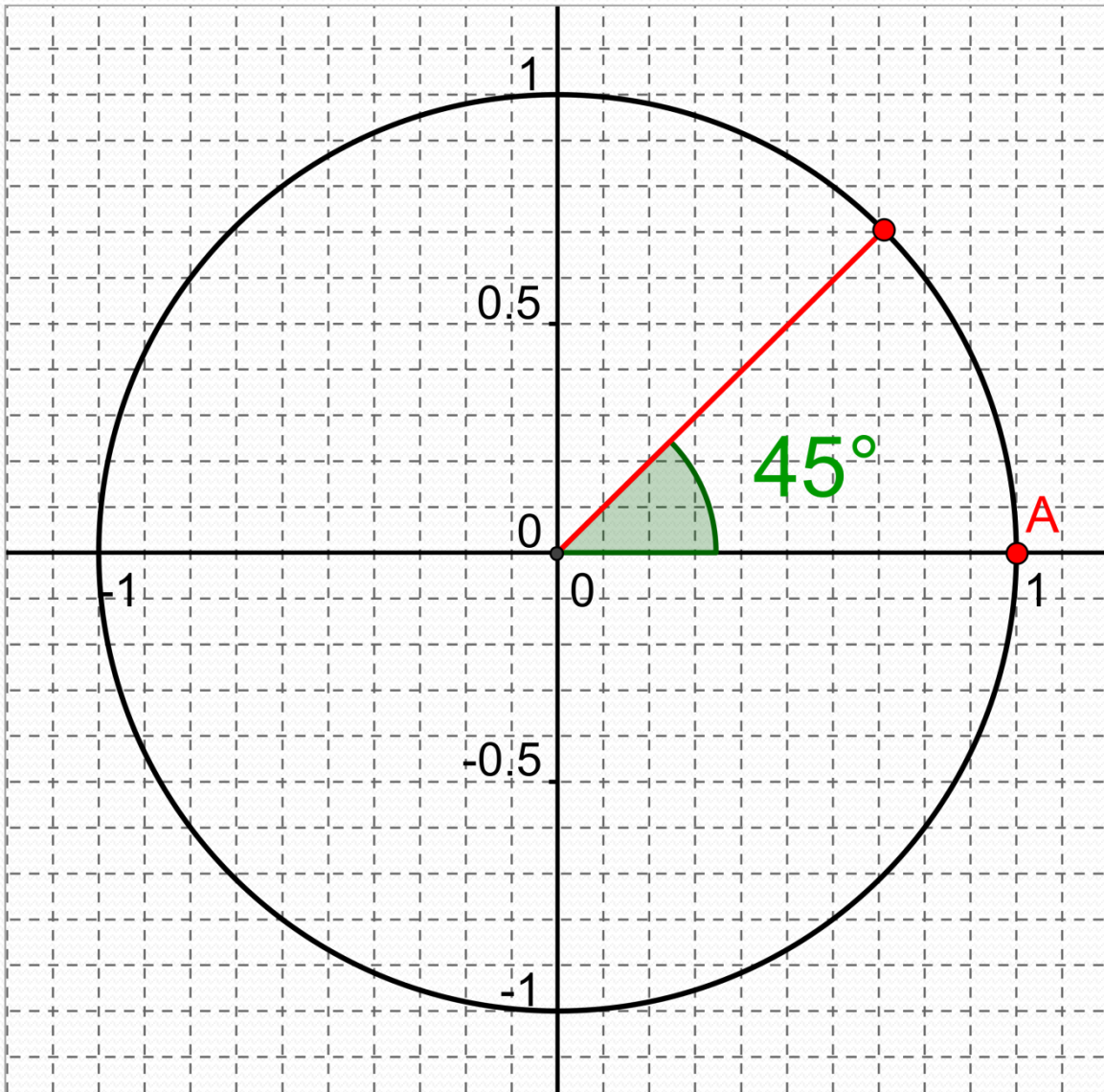


## Question 8

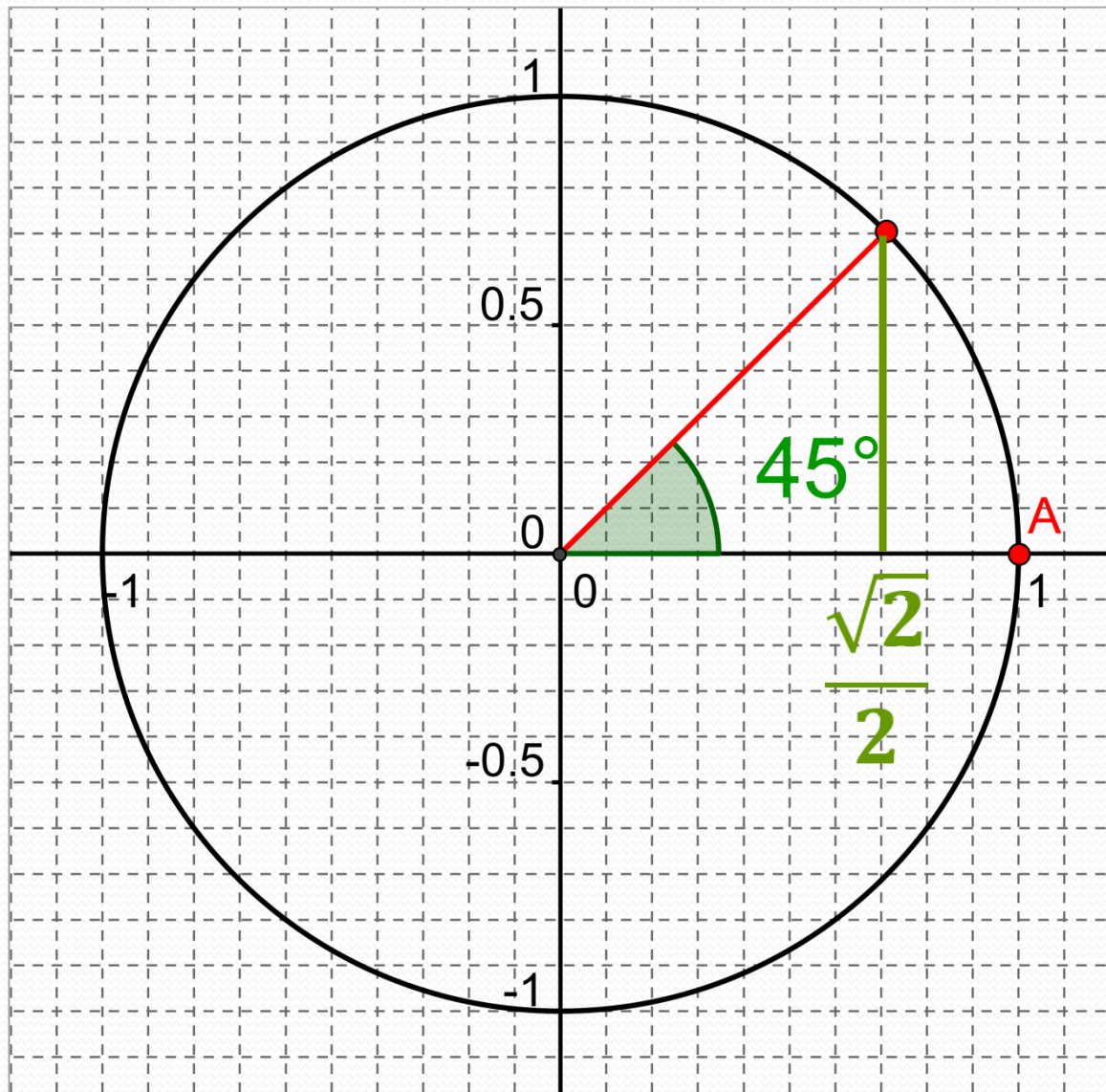


$$\cos 30^\circ = \frac{\sqrt{3}}{2}$$
$$\sin 30^\circ = \frac{1}{2}$$

## Question 9

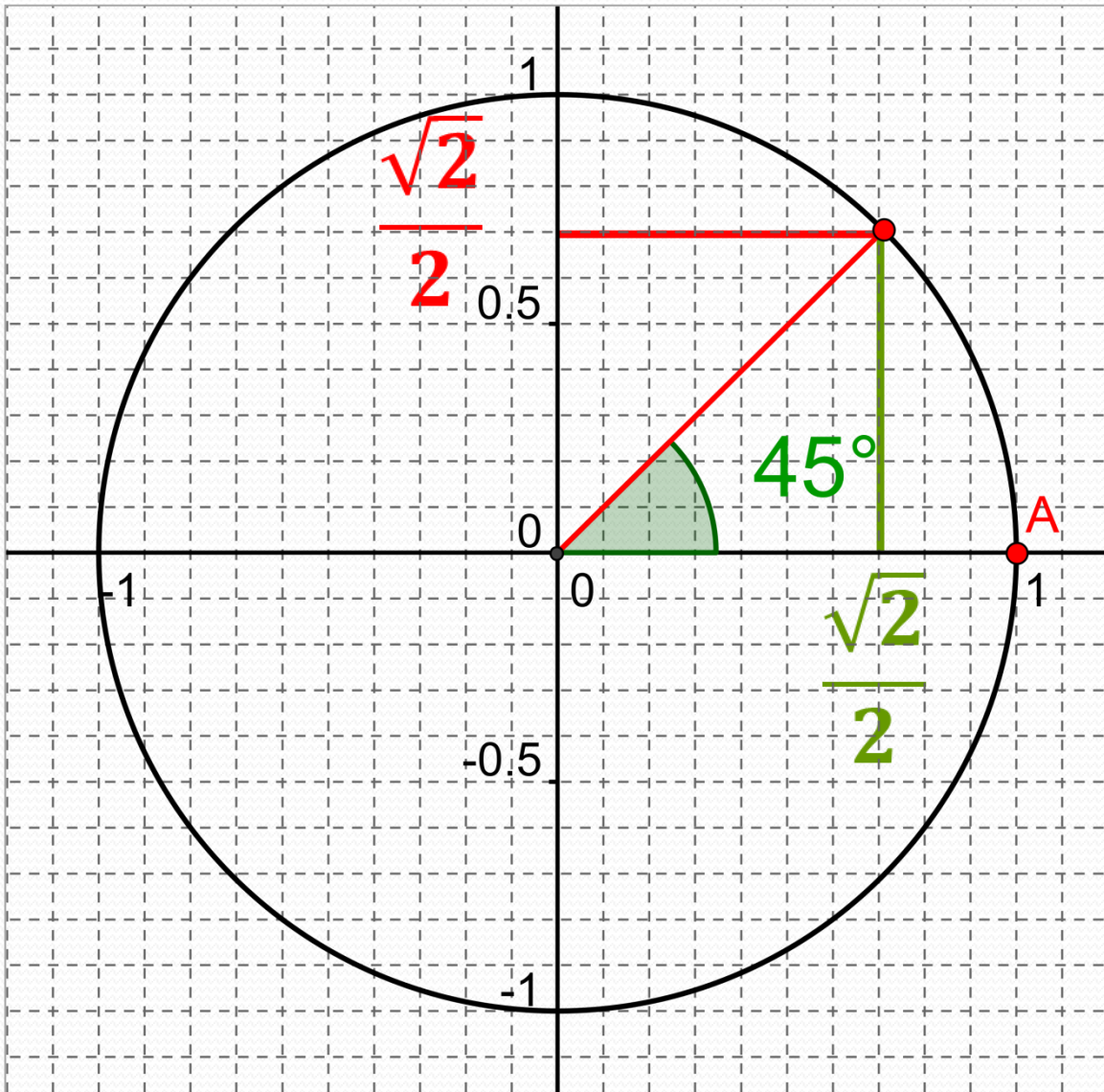


## Question 9

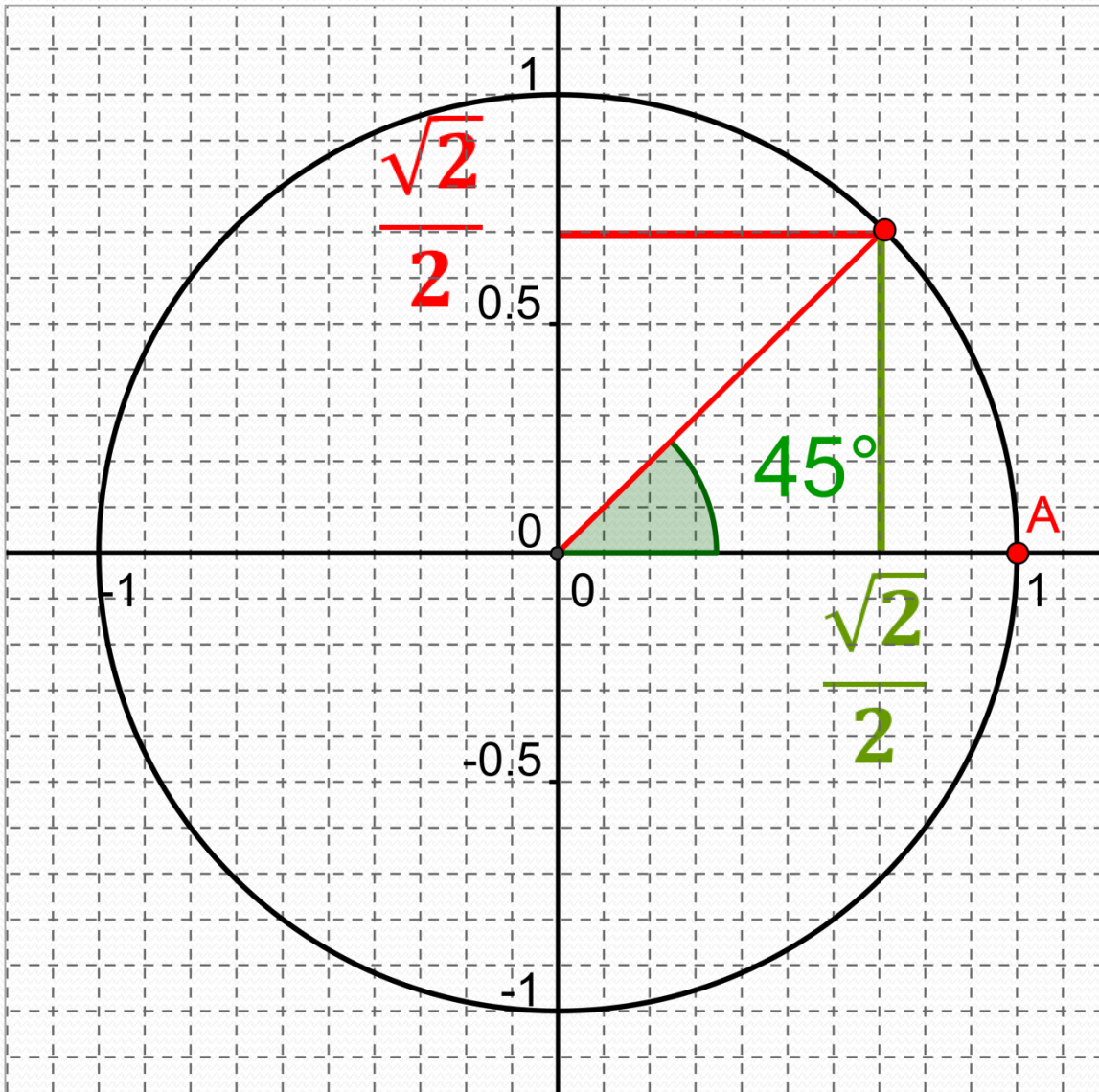




## Question 9



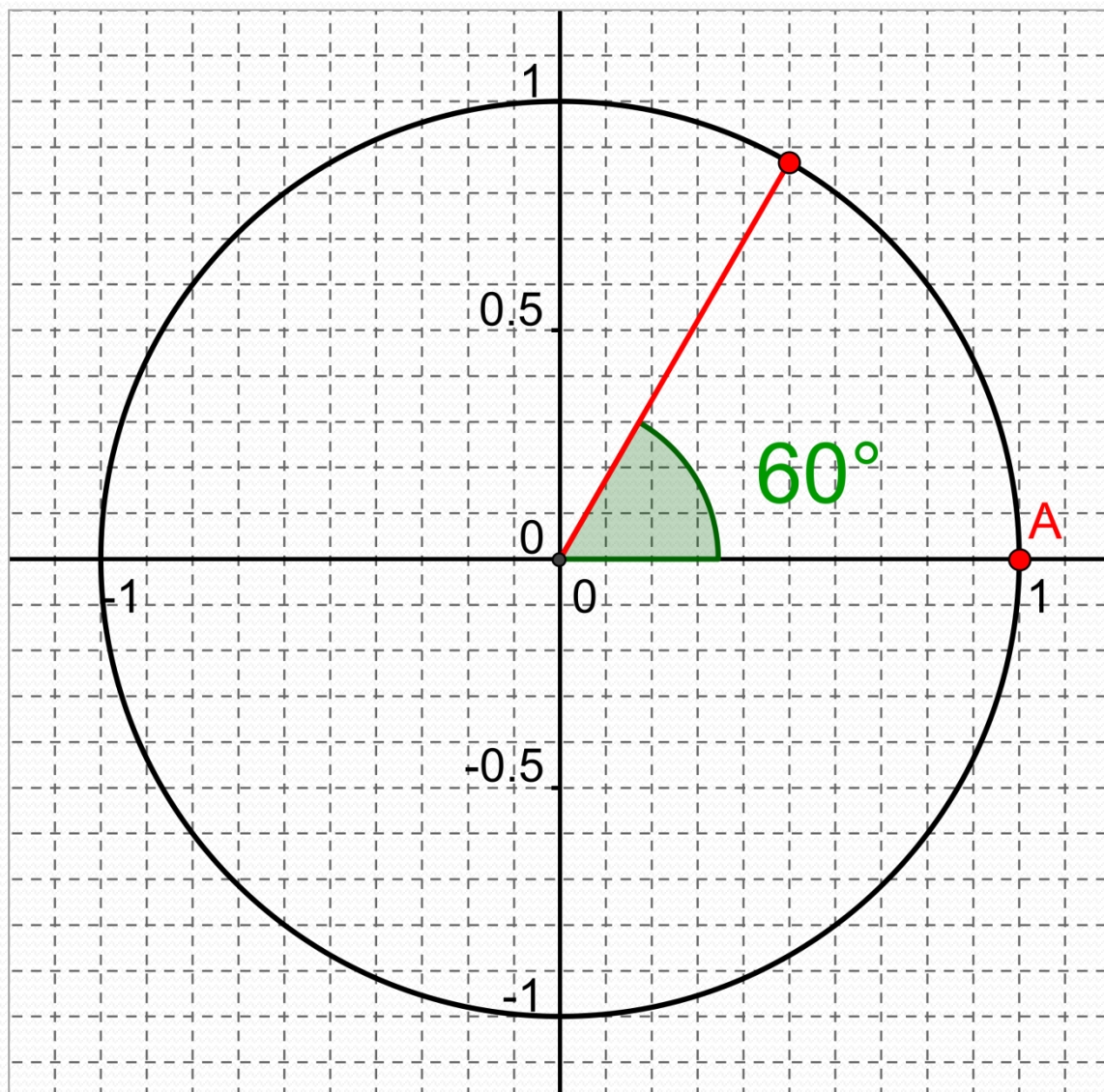
## Question 9



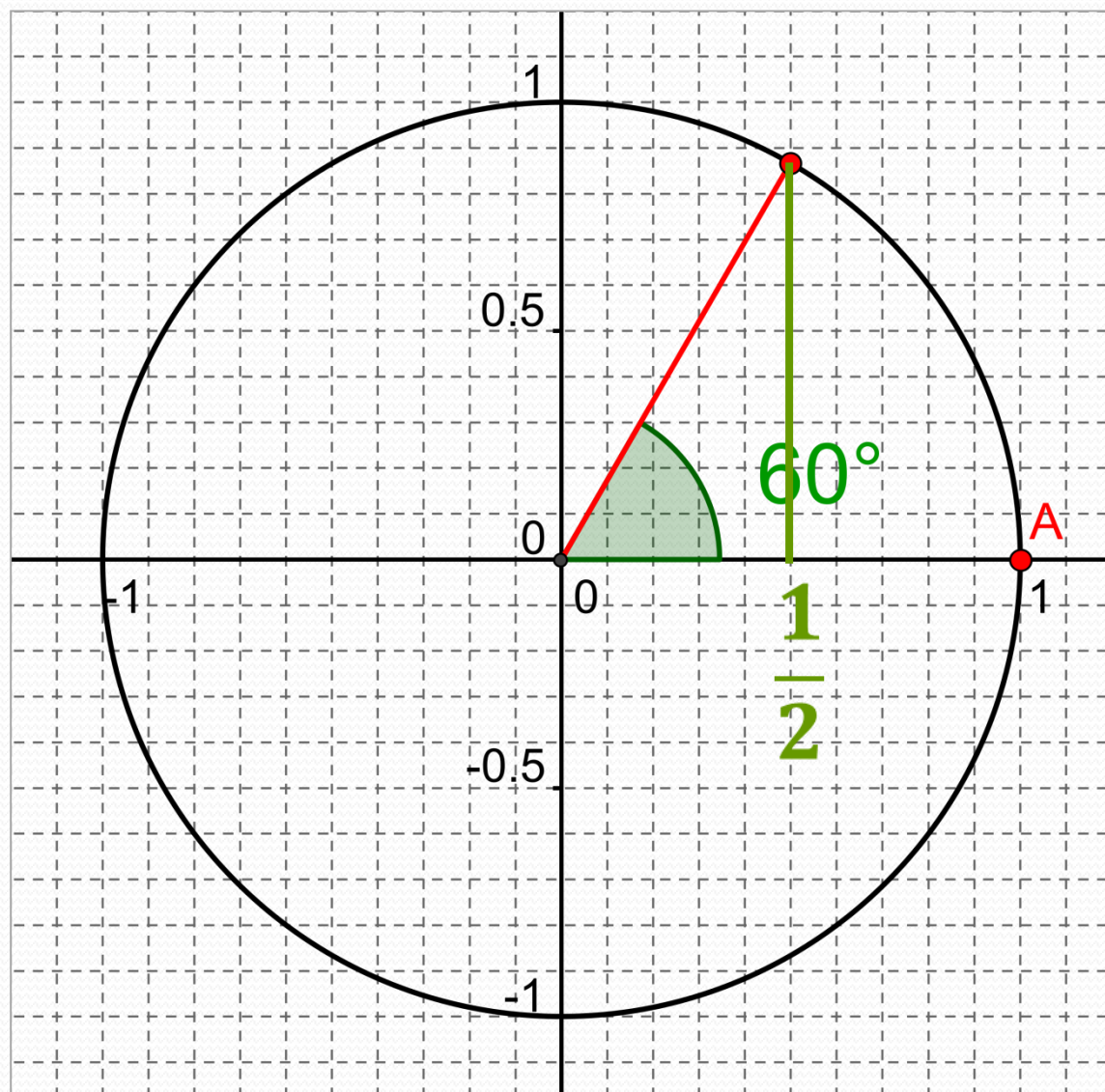
$$\cos 45^\circ = \frac{\sqrt{2}}{2}$$

$$\sin 45^\circ = \frac{\sqrt{2}}{2}$$

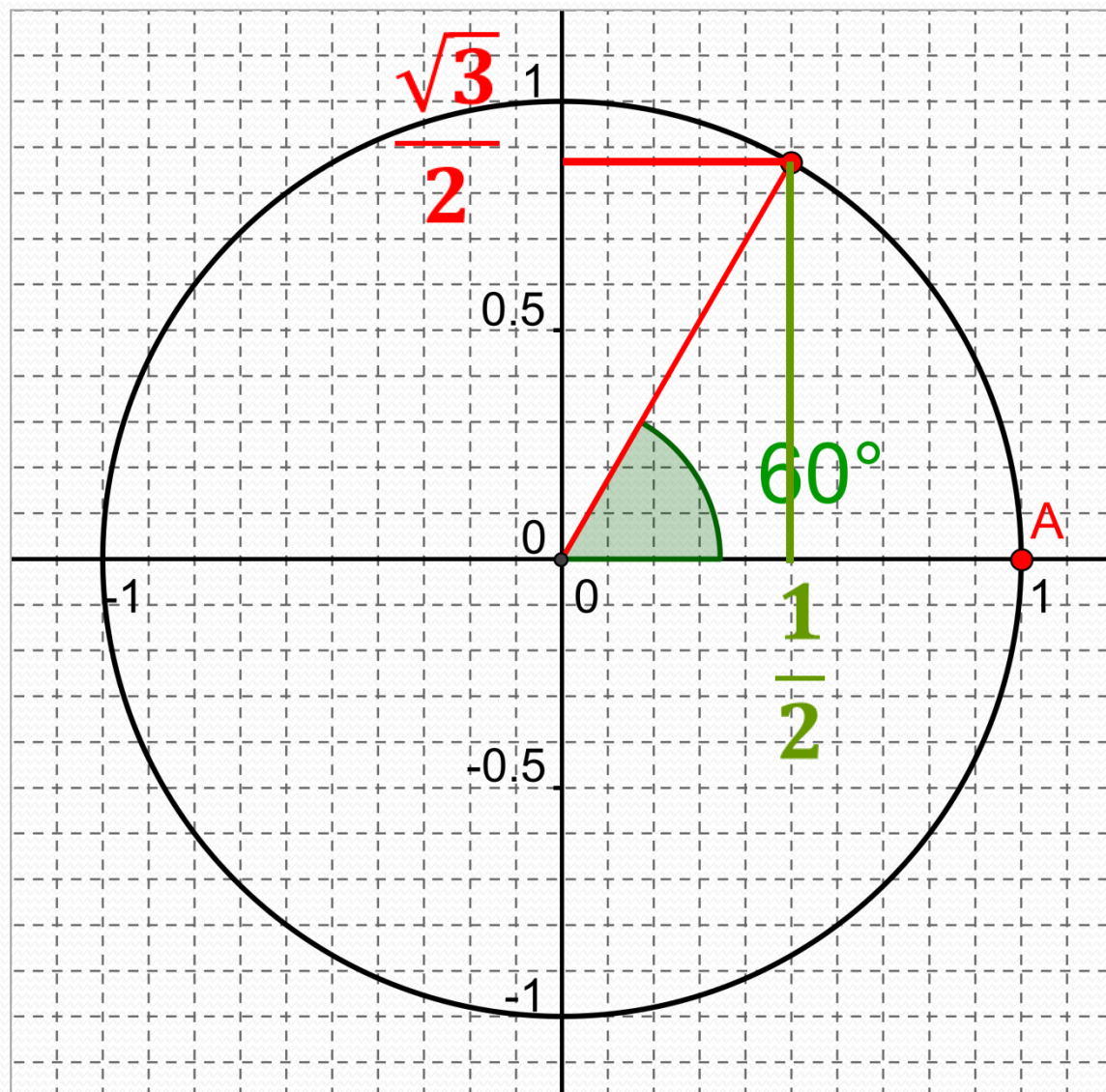
## Question 10



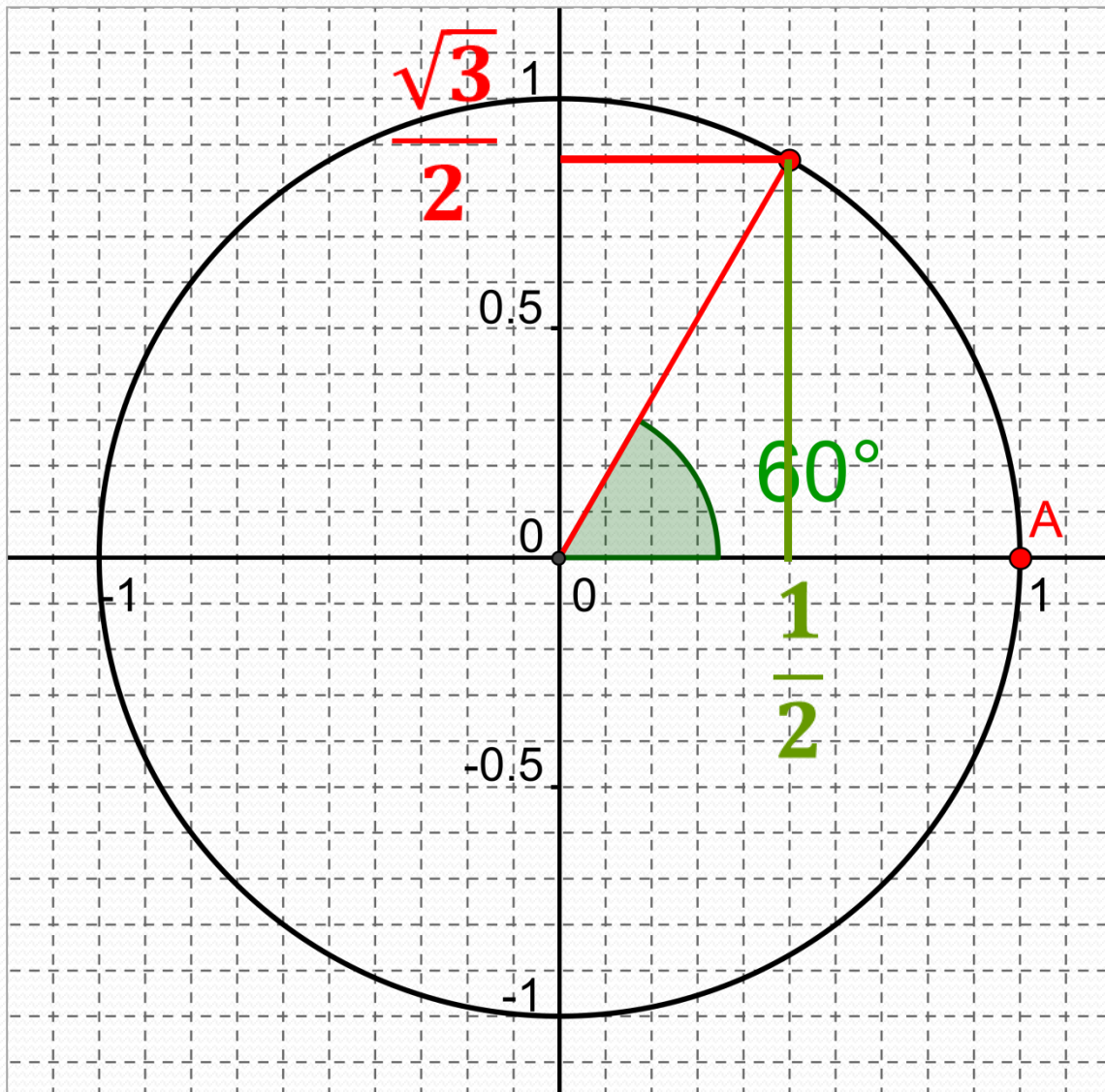
## Question 10



## Question 10



## Question 10



$$\cos 60^\circ = \frac{1}{2}$$

$$\sin 60^\circ = \frac{\sqrt{3}}{2}$$

# Fin

Activités mentales et automatismes en classe de première  
IREM de Clermont-Ferrand