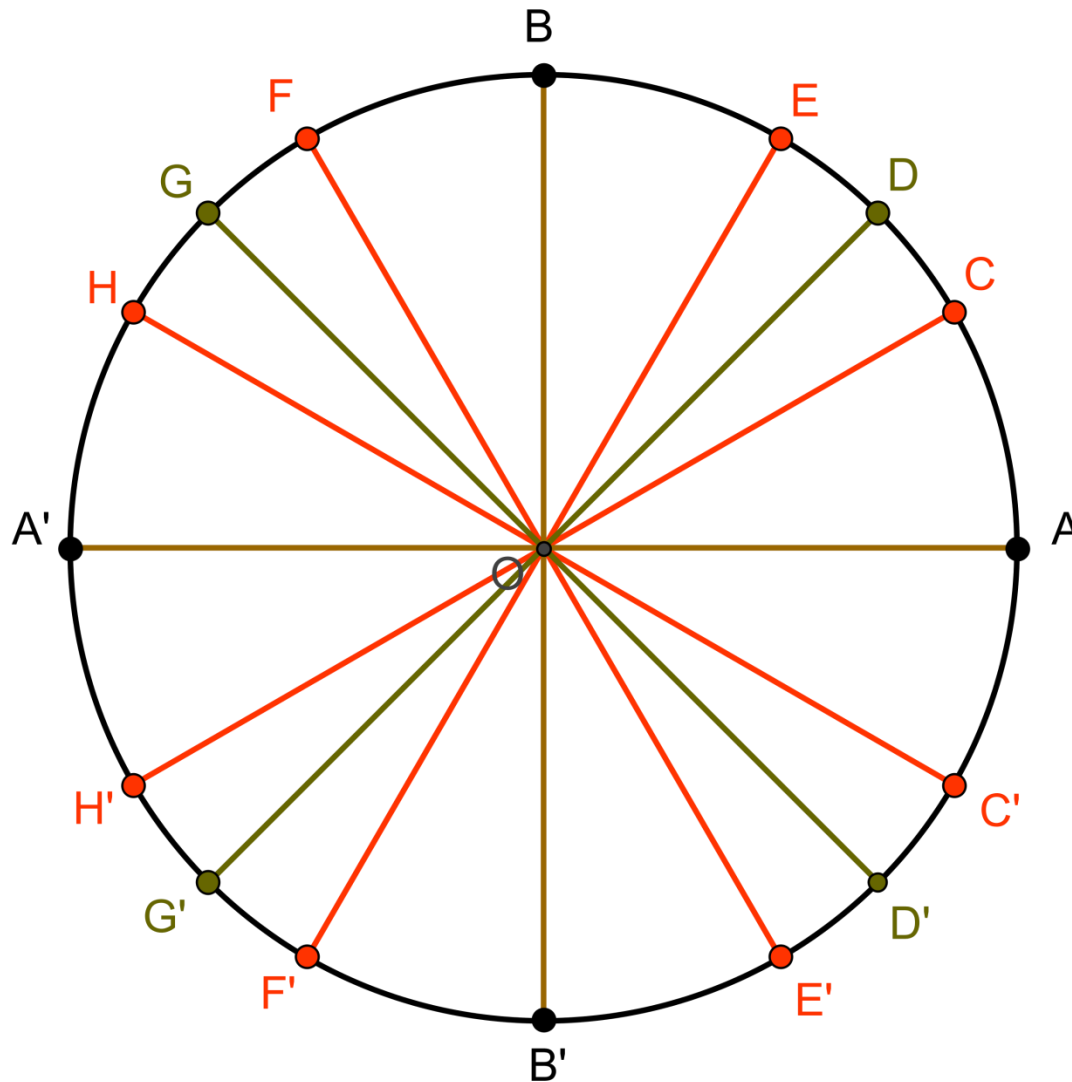


TRIGONOMÉTRIE

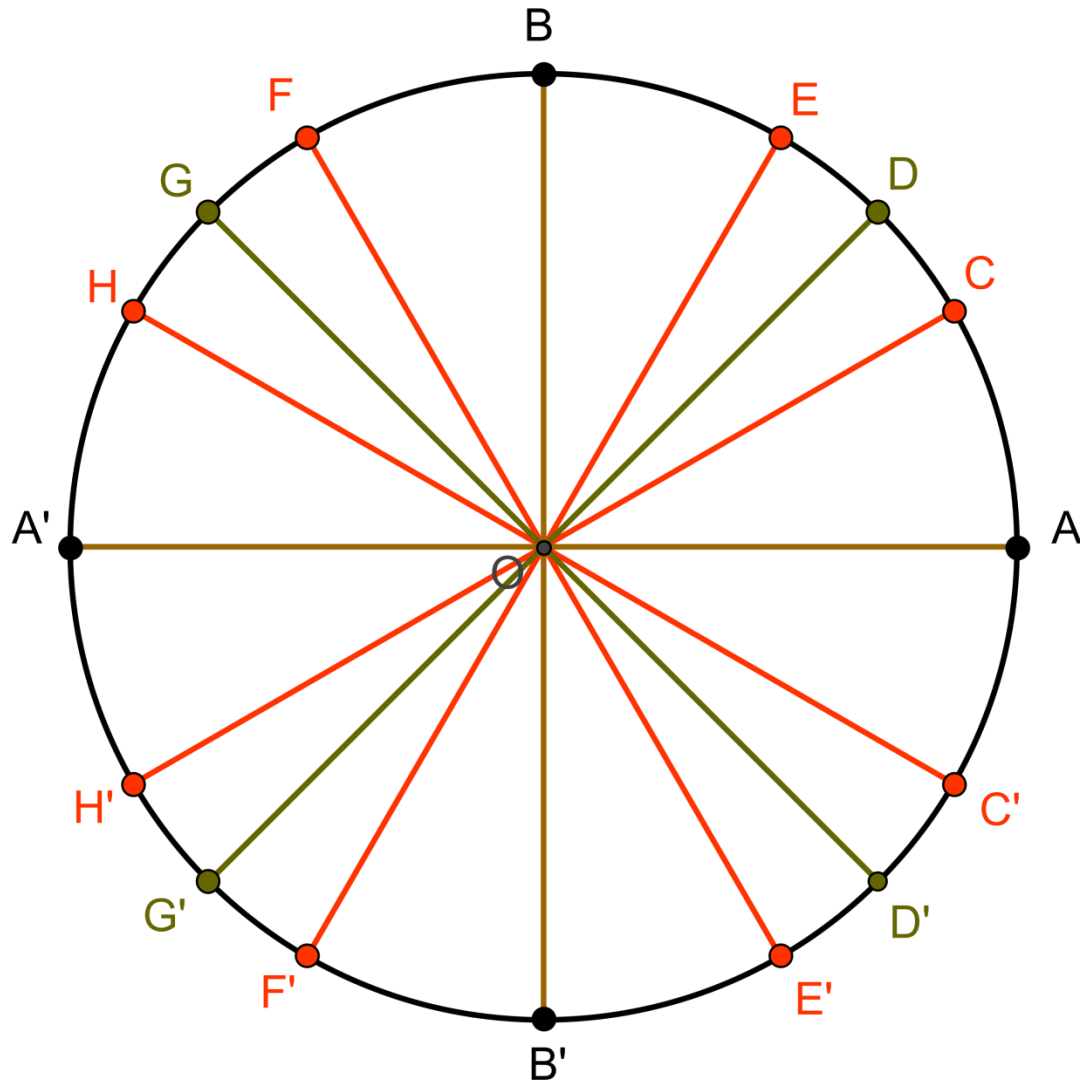
SÉRIE 2

Calcul mental et automatismes – IREM de Clermont-Ferrand

Les segments orange partagent le cercle trigonométrique en douze angles de 30° et les segments verts en huit angles de 45° .

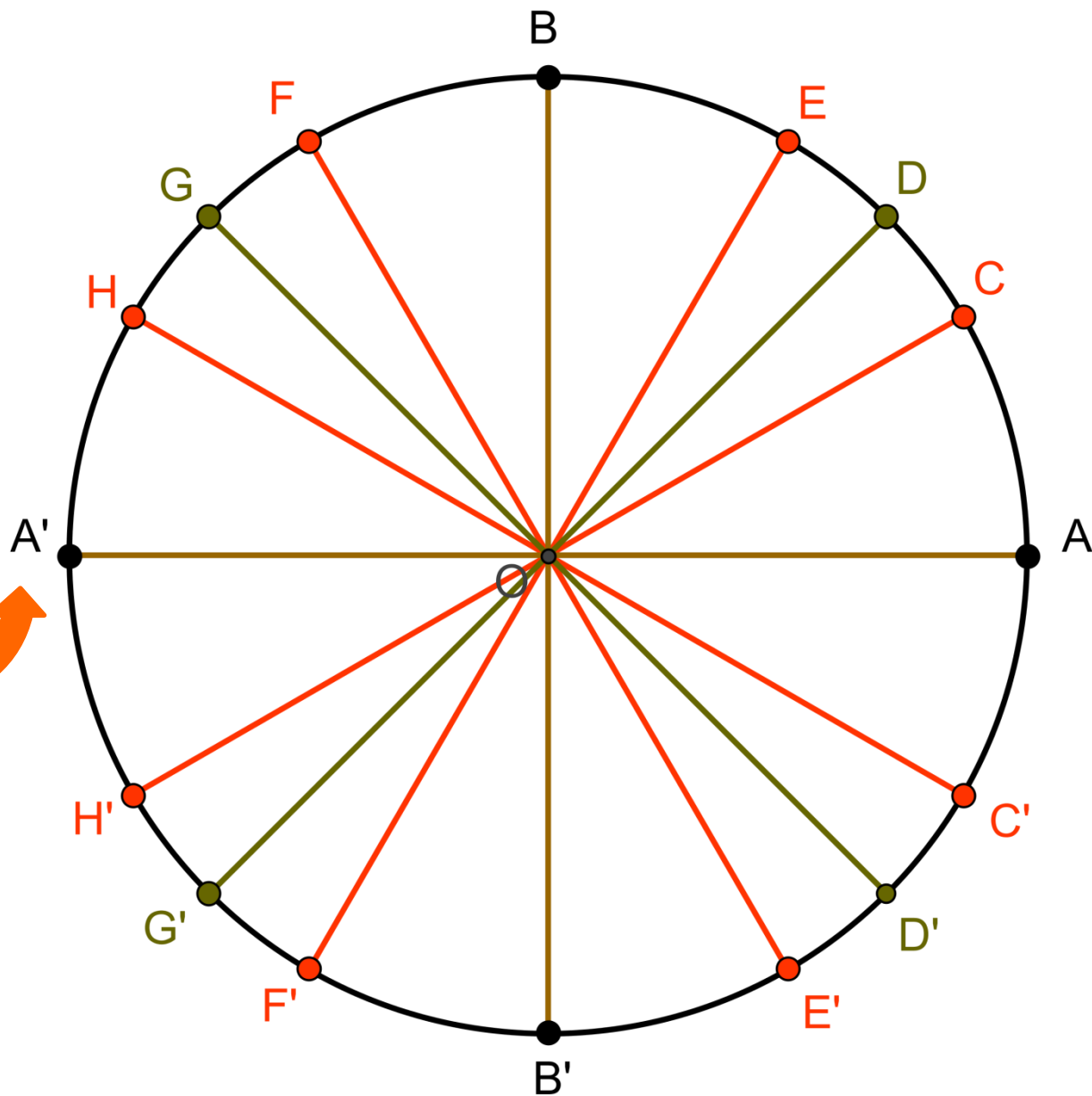


Associer chacun des nombres
donnés à un point du cercle.



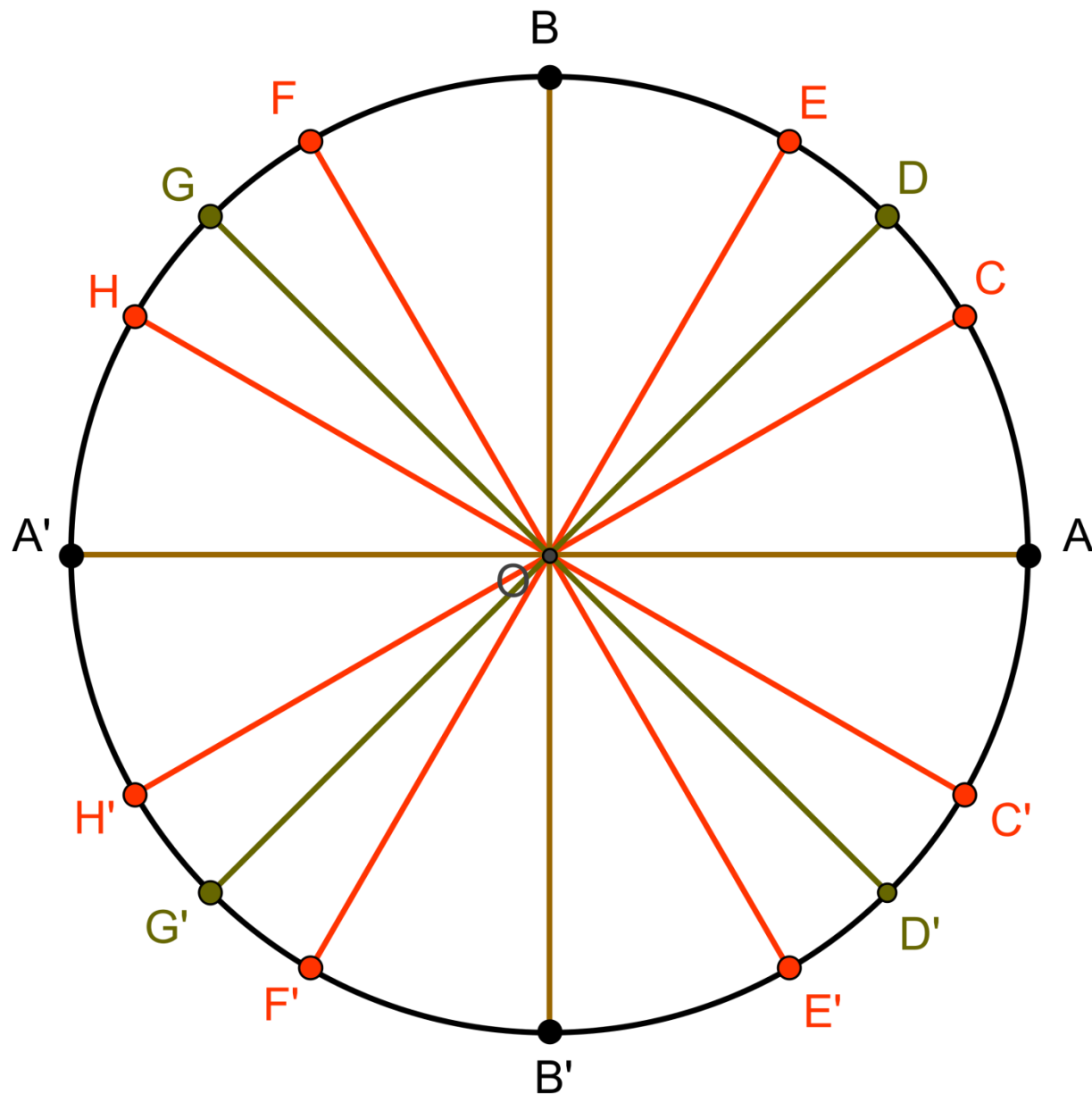
Nº0

π



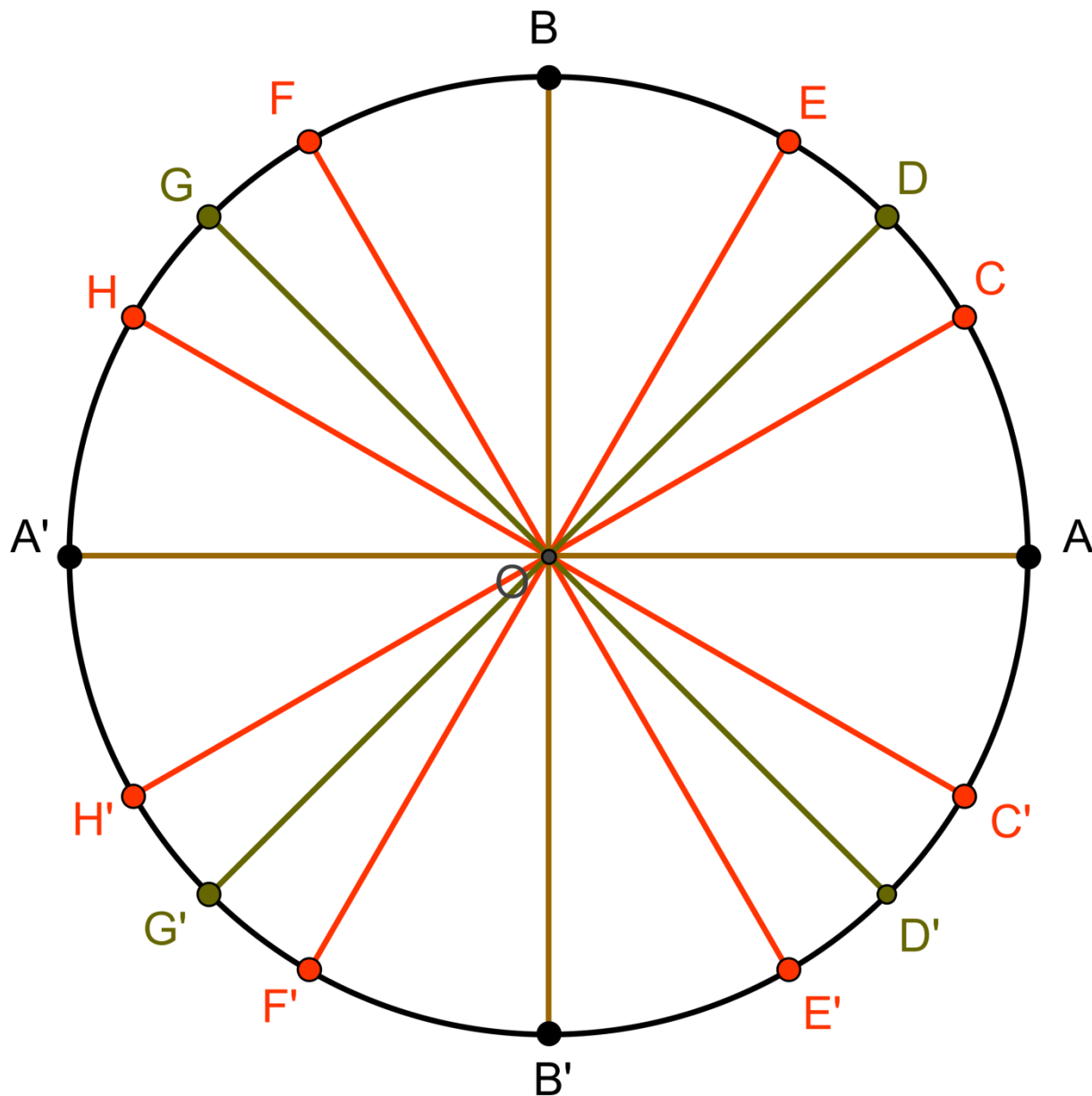
Nº1

π
—
2



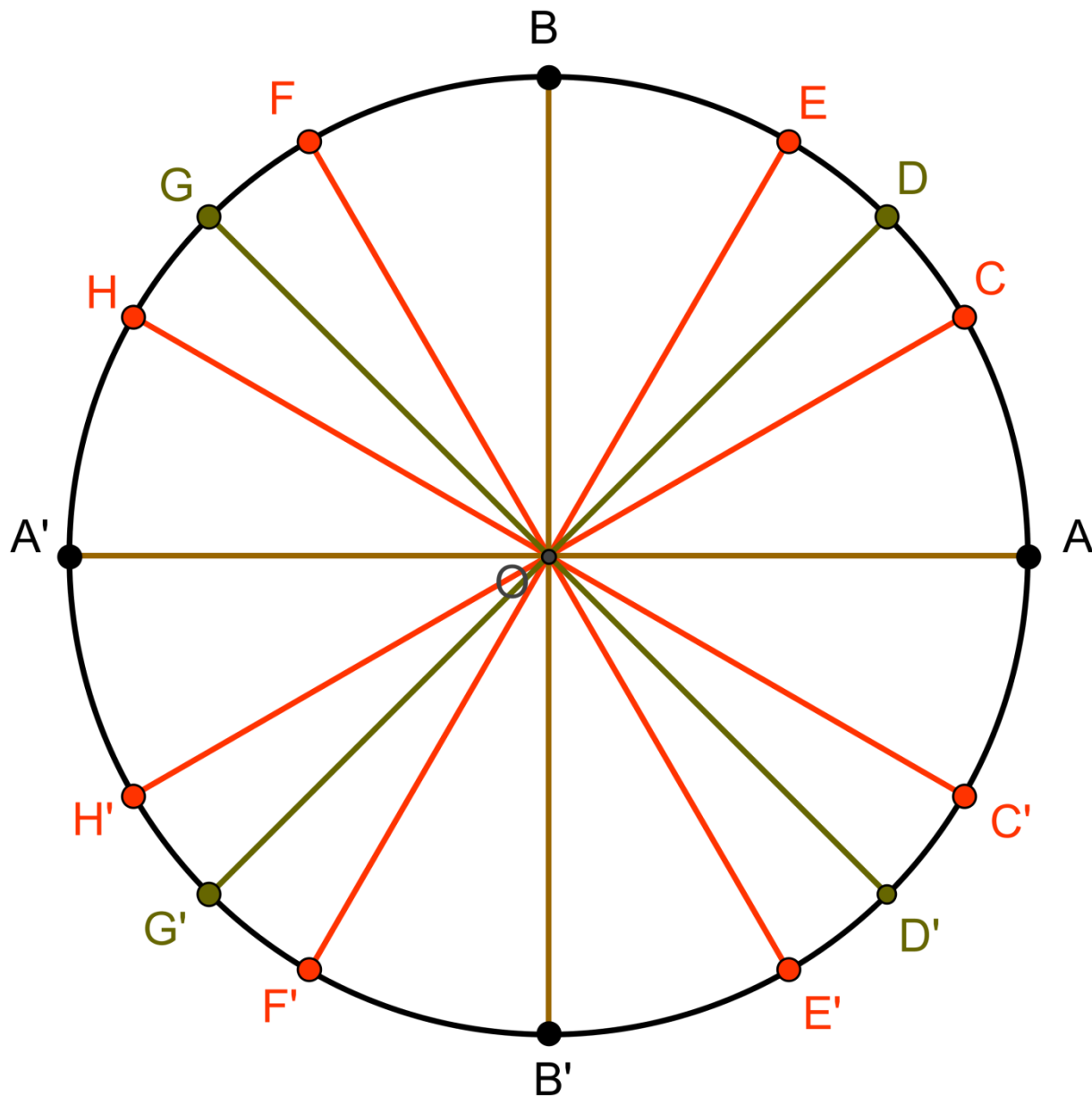
Nº2

π
—
4



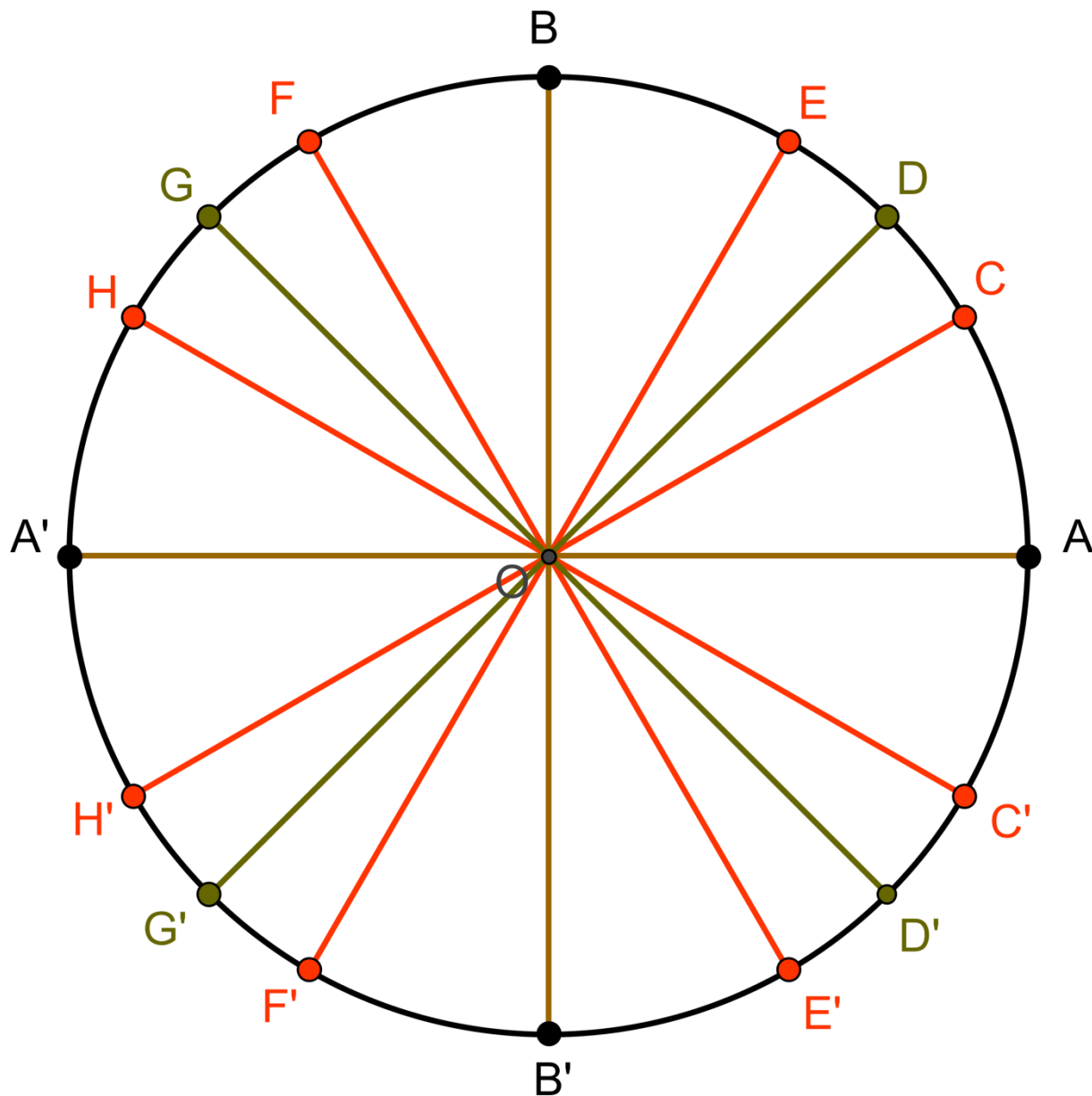
Nº3

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



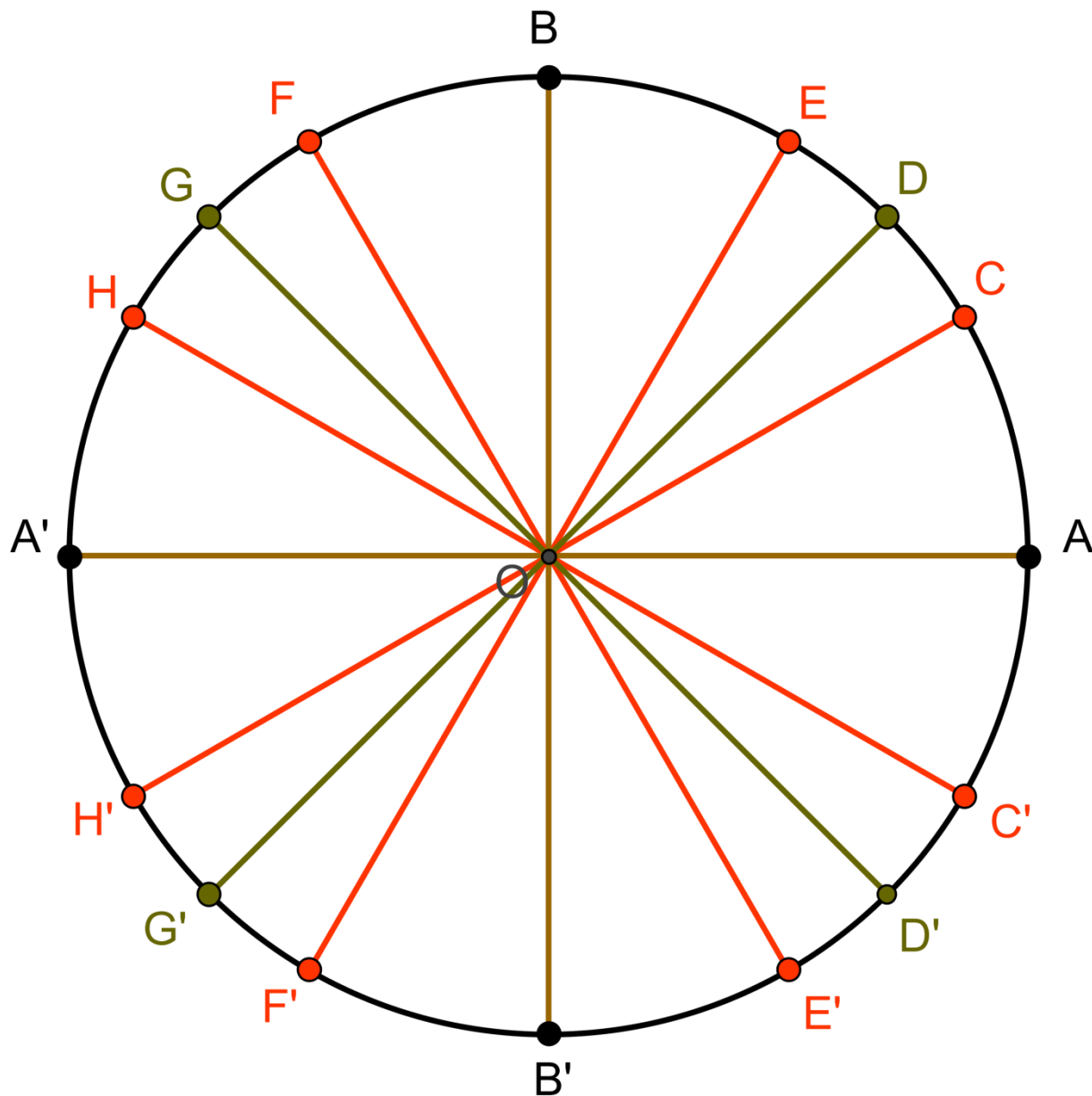
Nº4

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



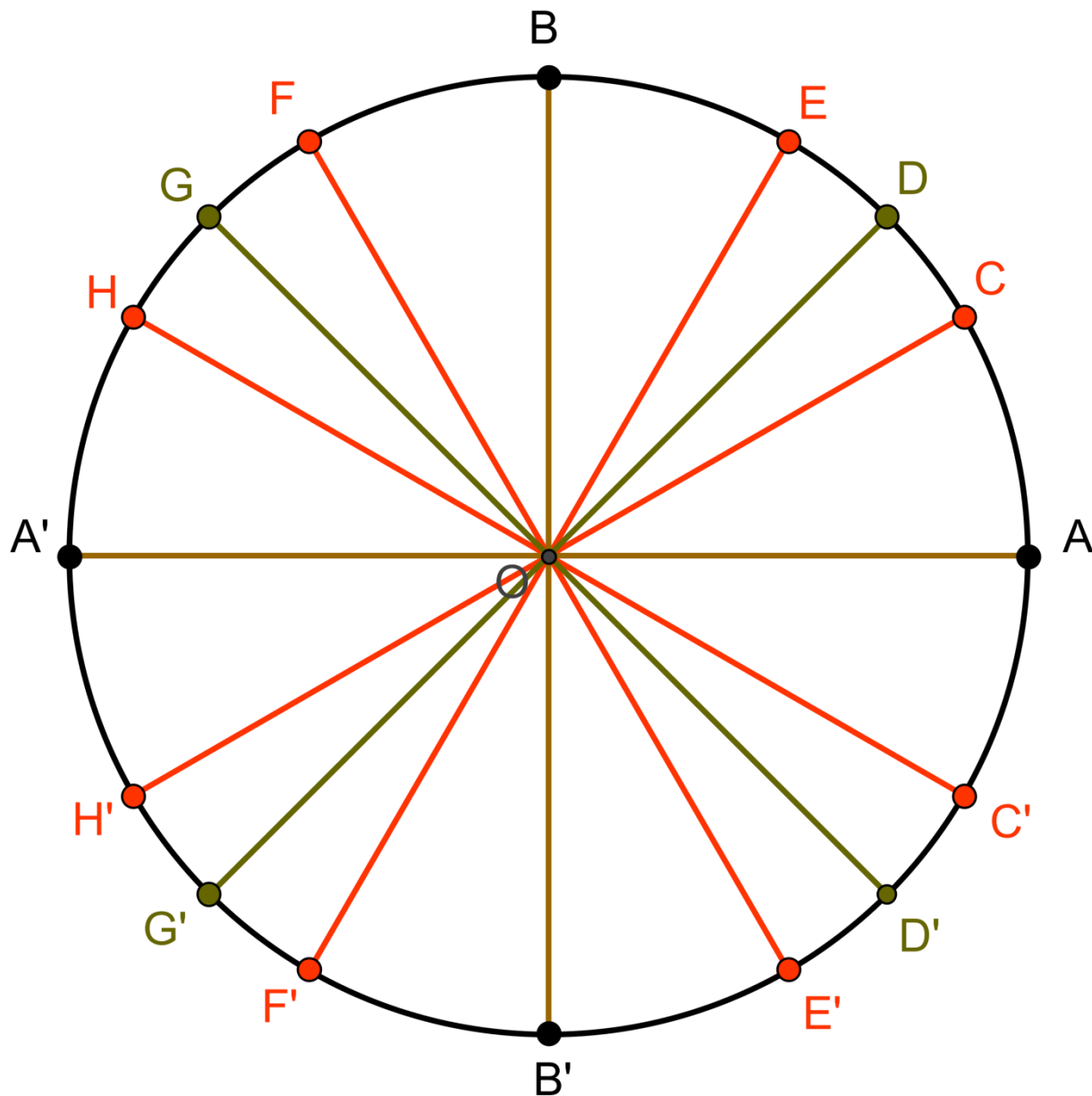
Nº5

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



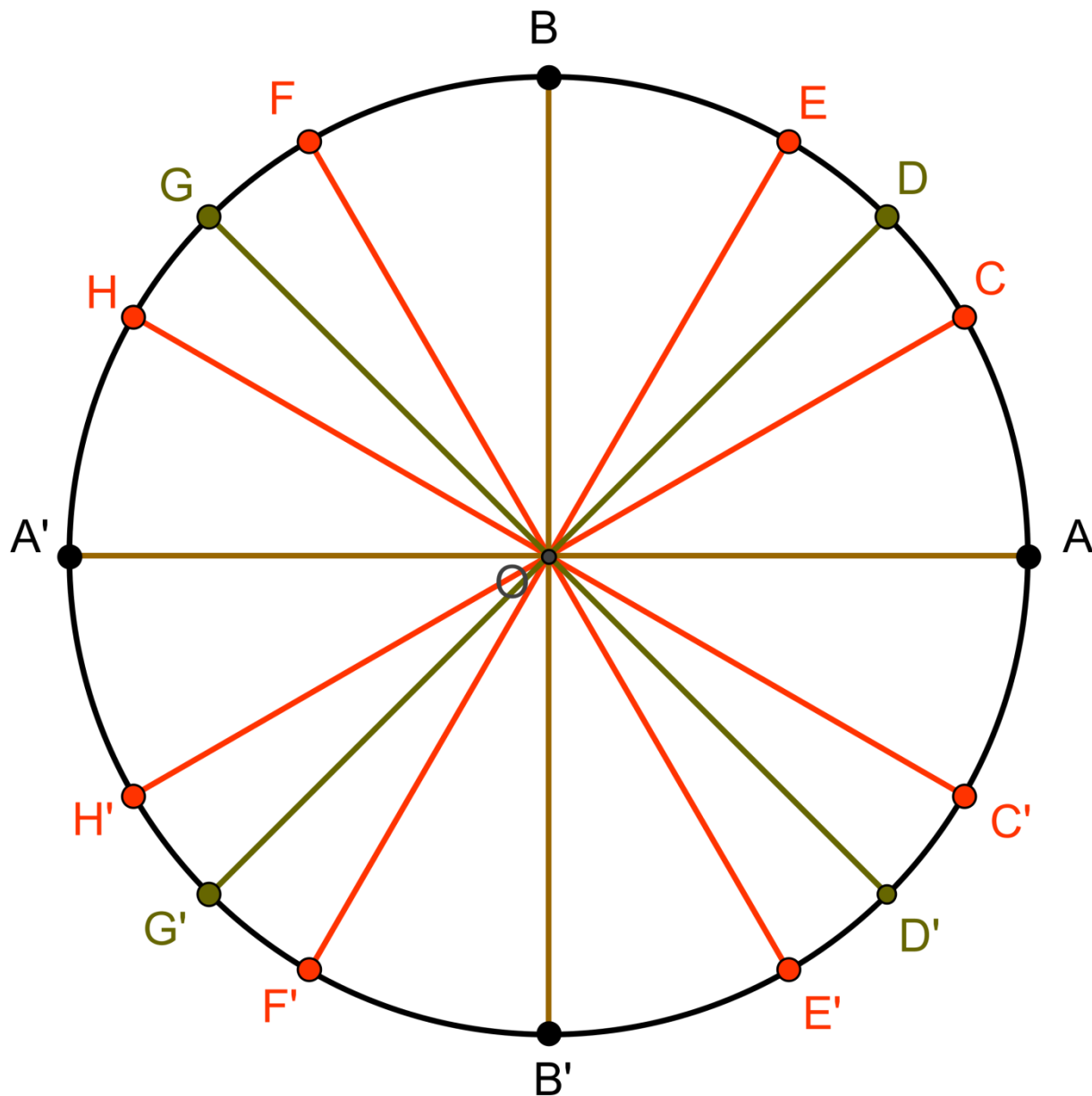
Nº6

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



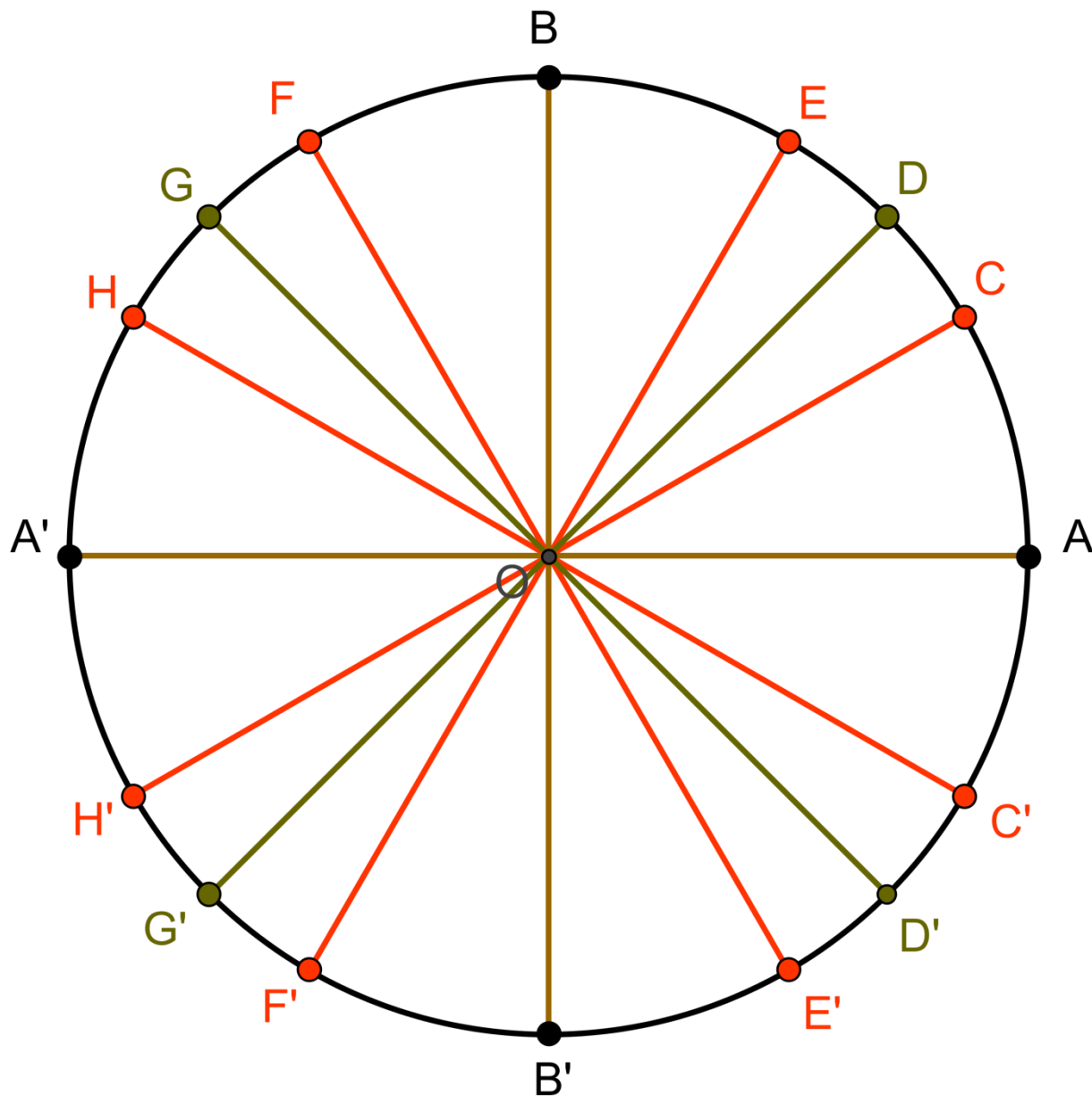
Nº7

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



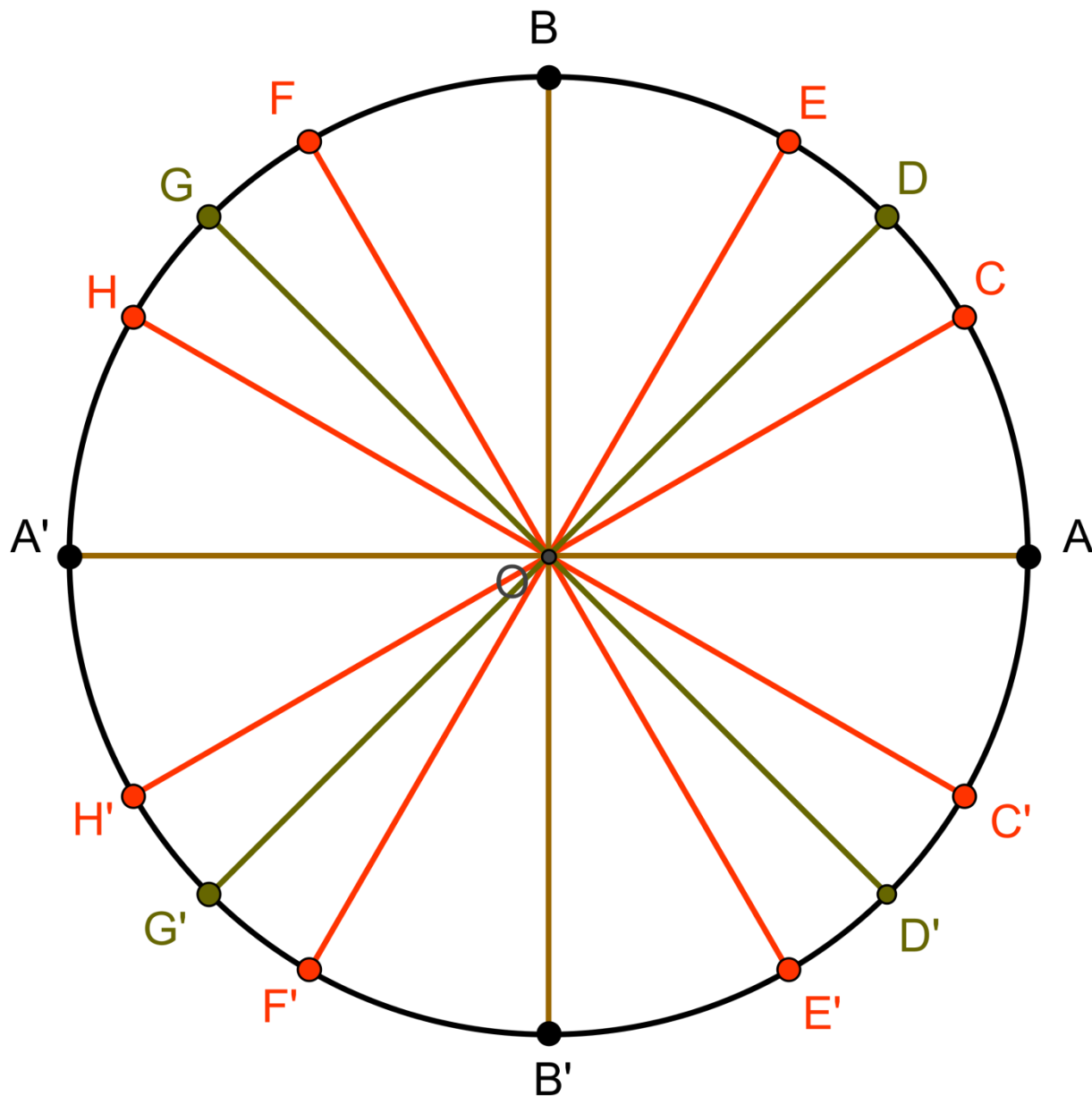
Nº8

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



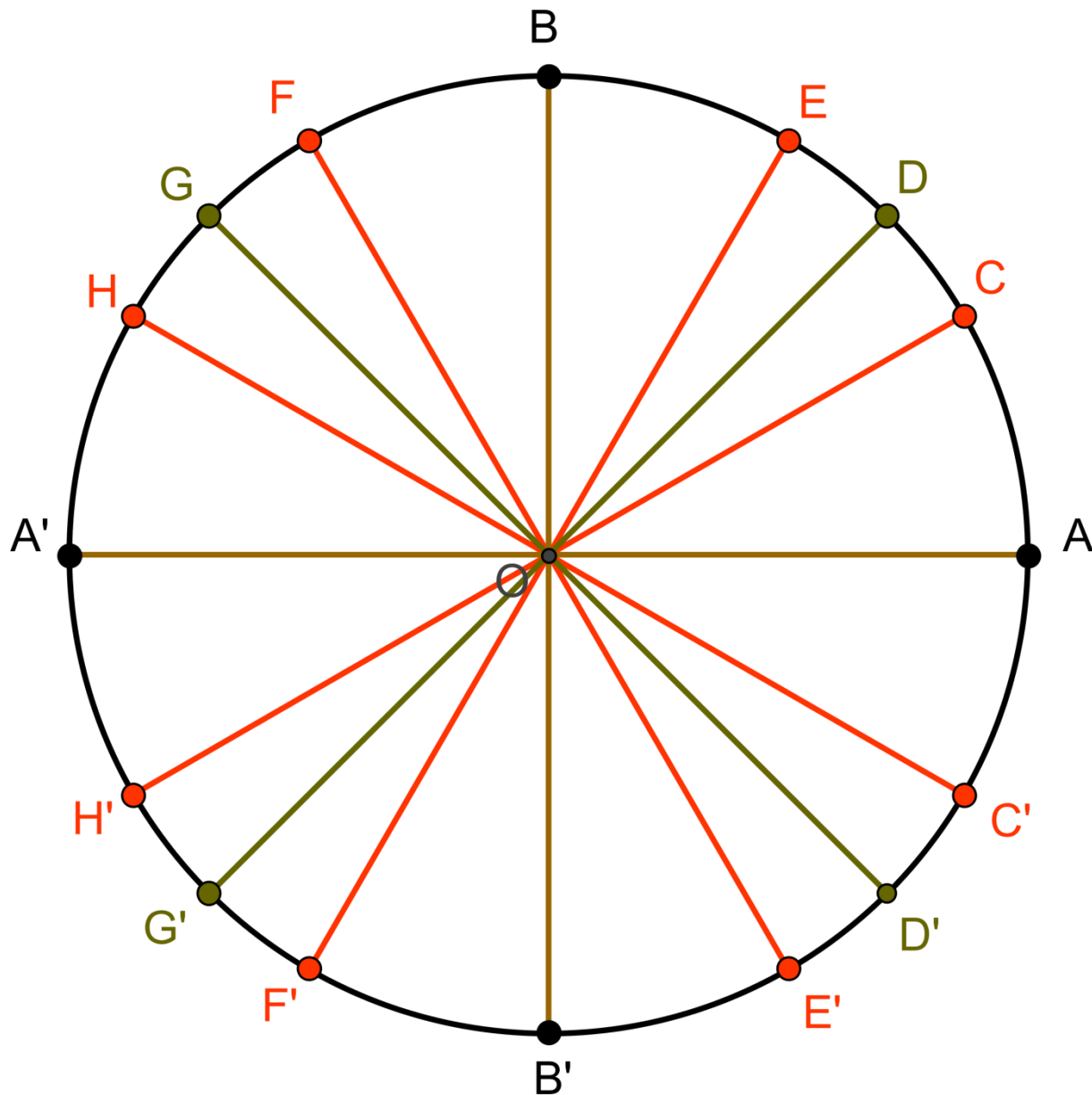
Nº9

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



Nº10

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



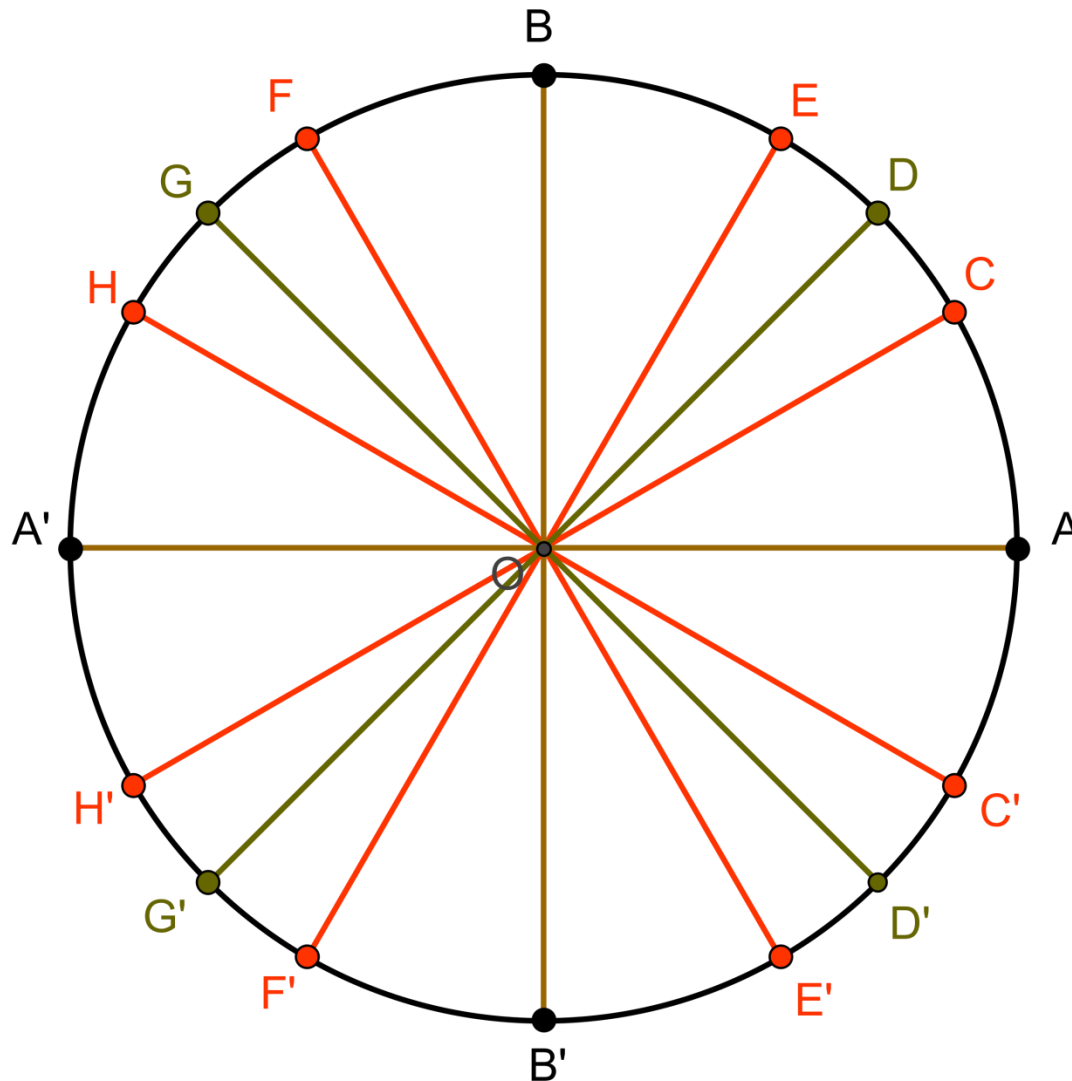
FIN

TRIGONOMÉTRIE

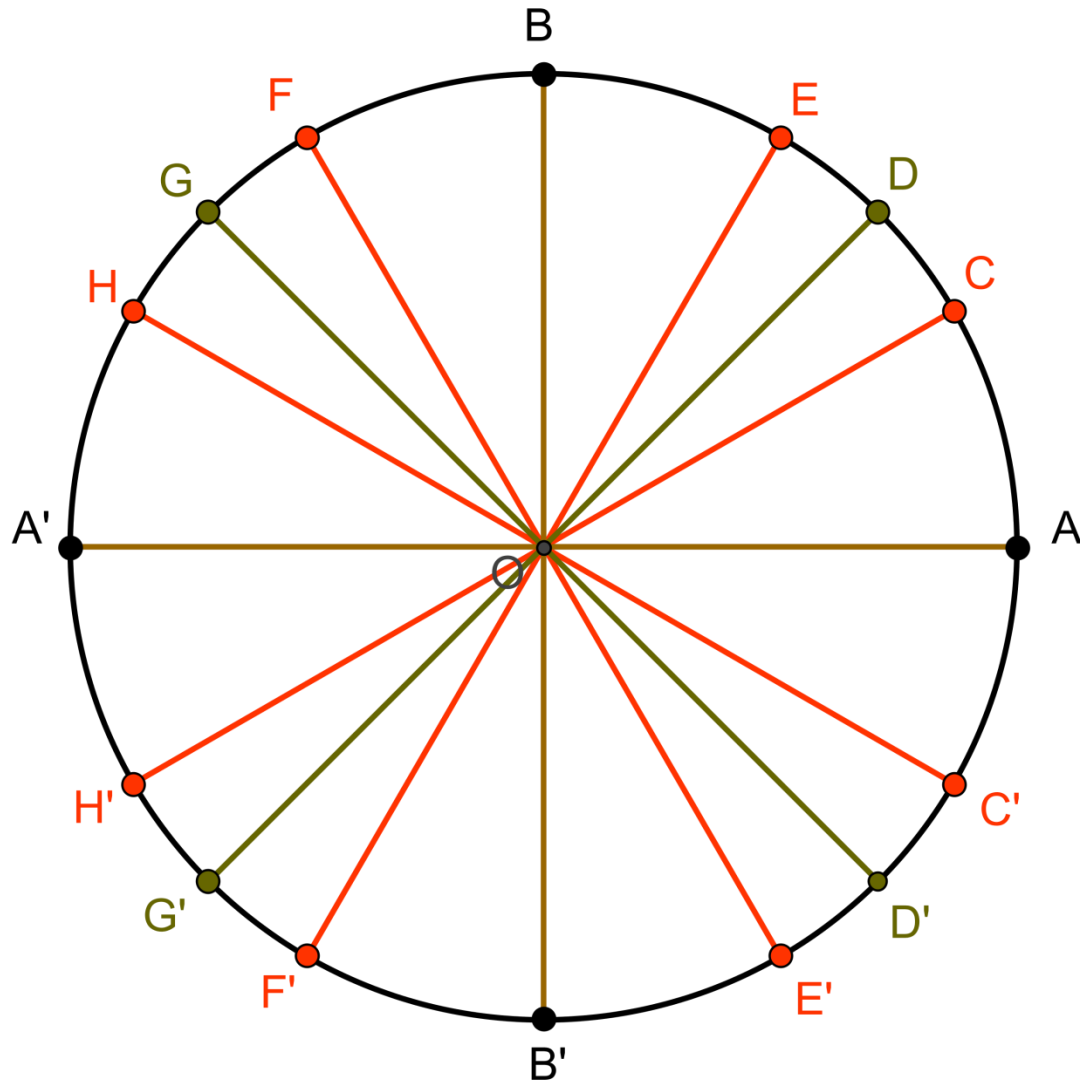
SÉRIE 3

Calcul mental et automatismes – IREM de Clermont-Ferrand

Les segments orange partagent le cercle trigonométrique en douze angles de 30° et les segments verts en huit angles de 45° .

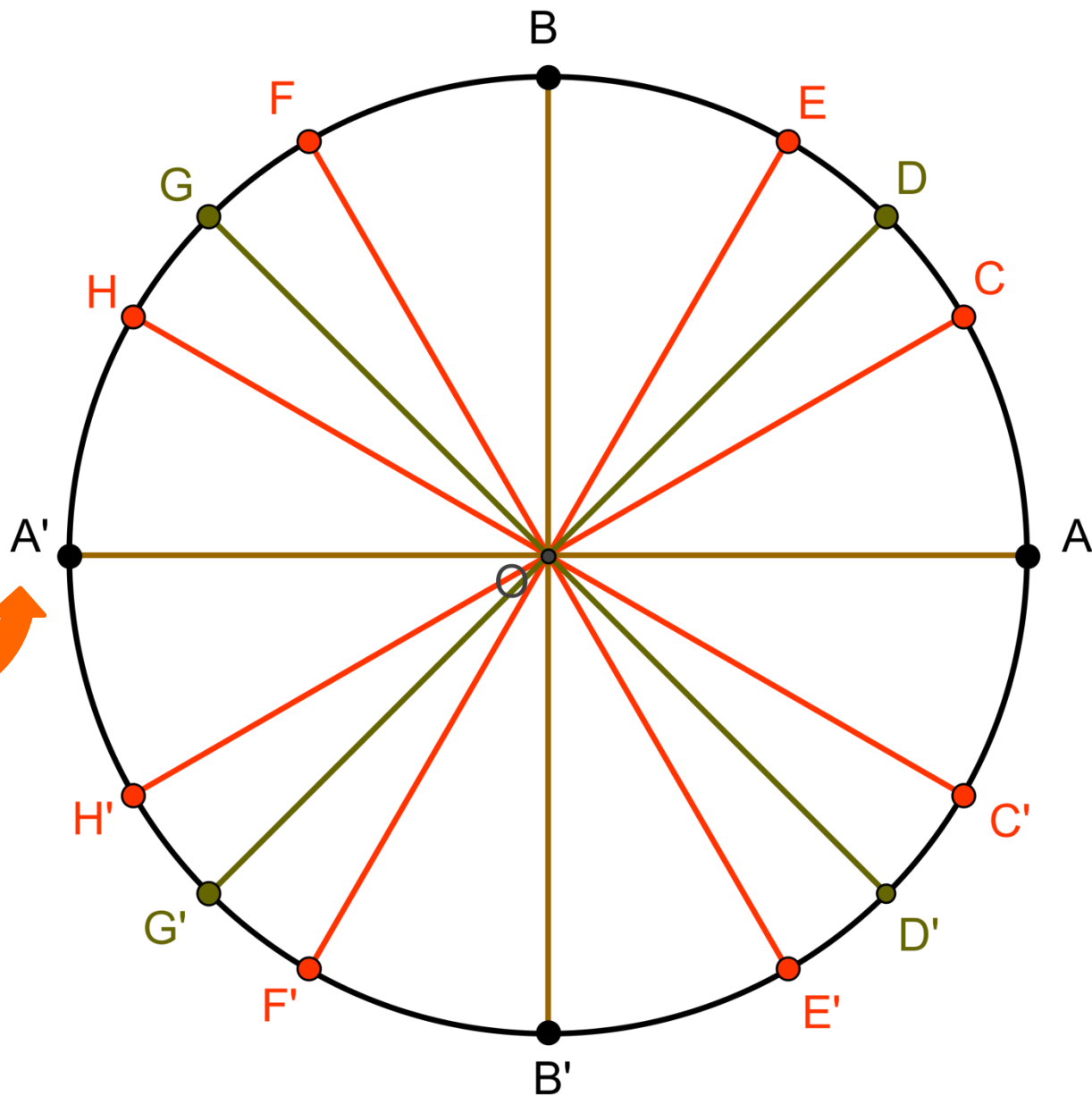


Associer chacun des nombres
donnés à un point du cercle.



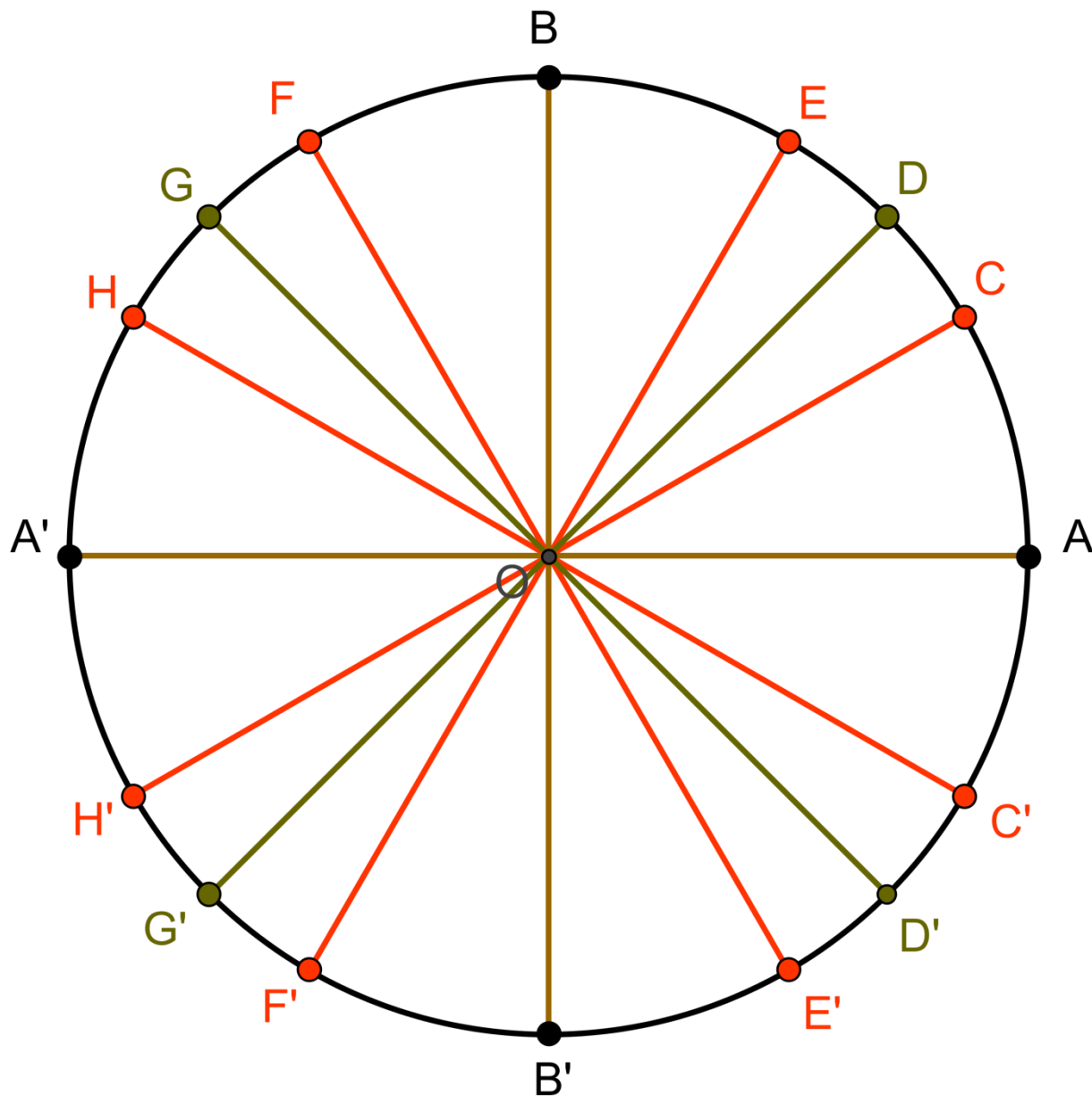
Nº0

π



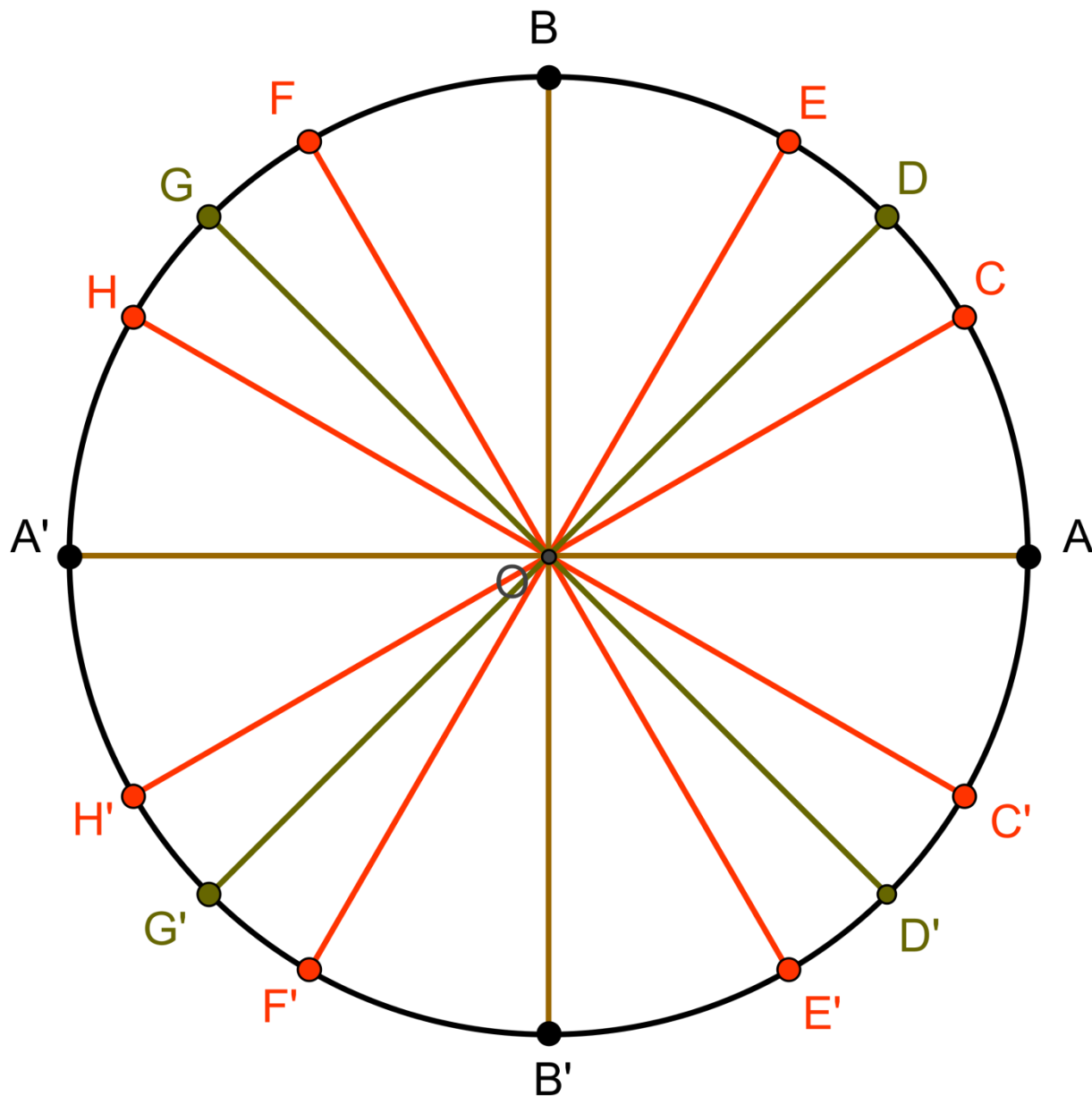
Nº1

-60π



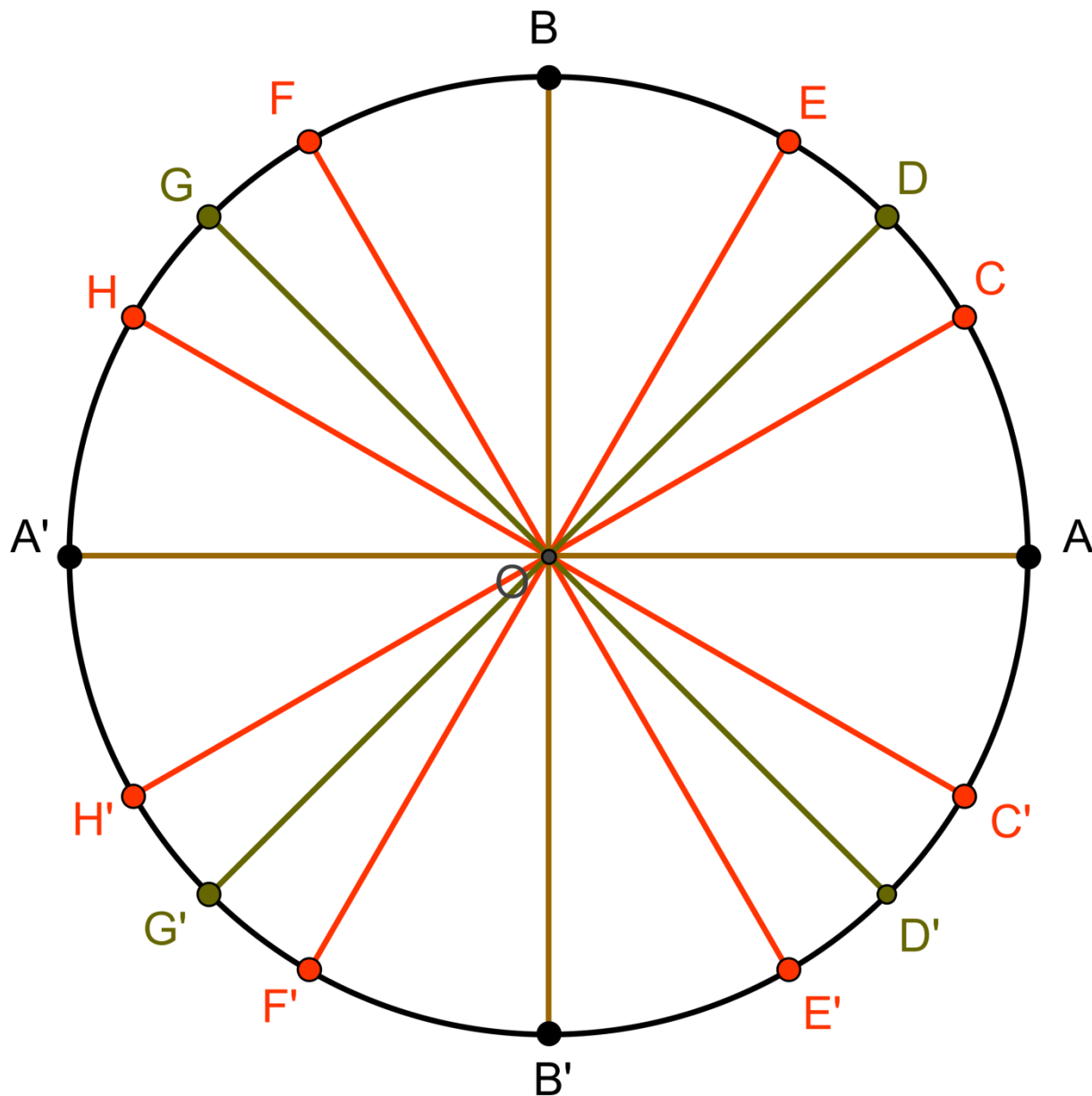
Nº2

1013π



Nº3

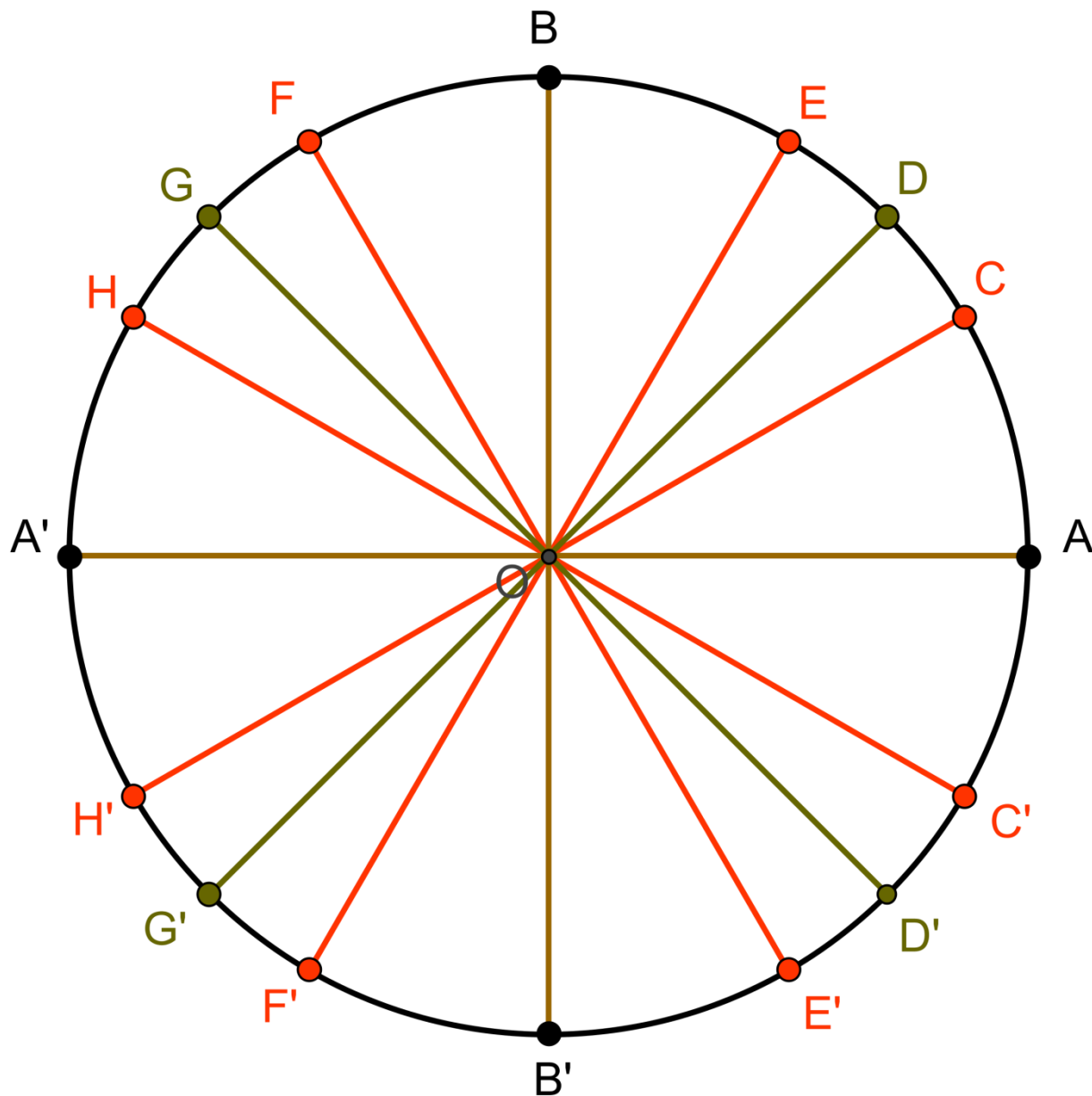
$$\frac{9\pi}{6}$$



Nº4

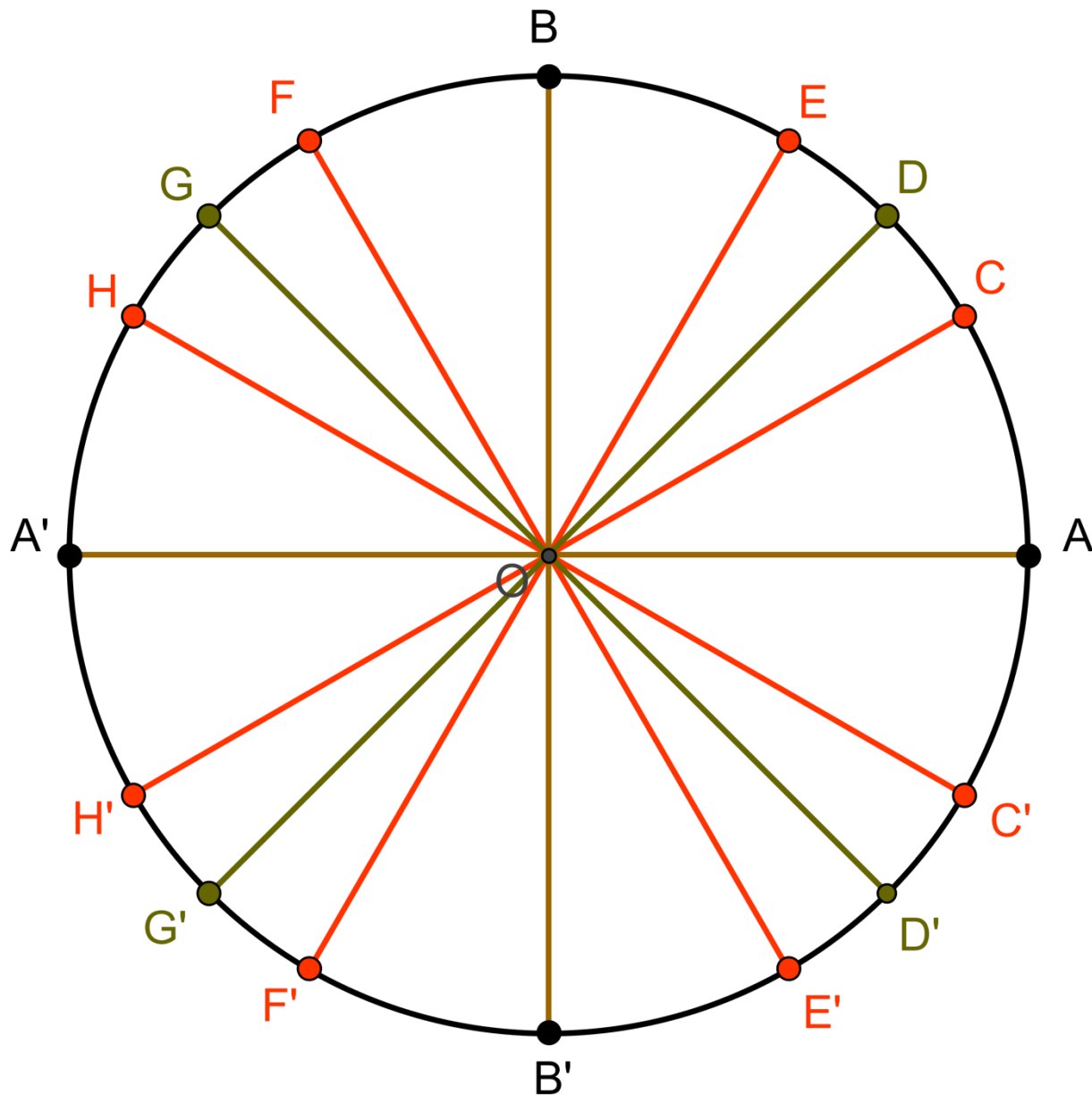
47π

2



Nº5

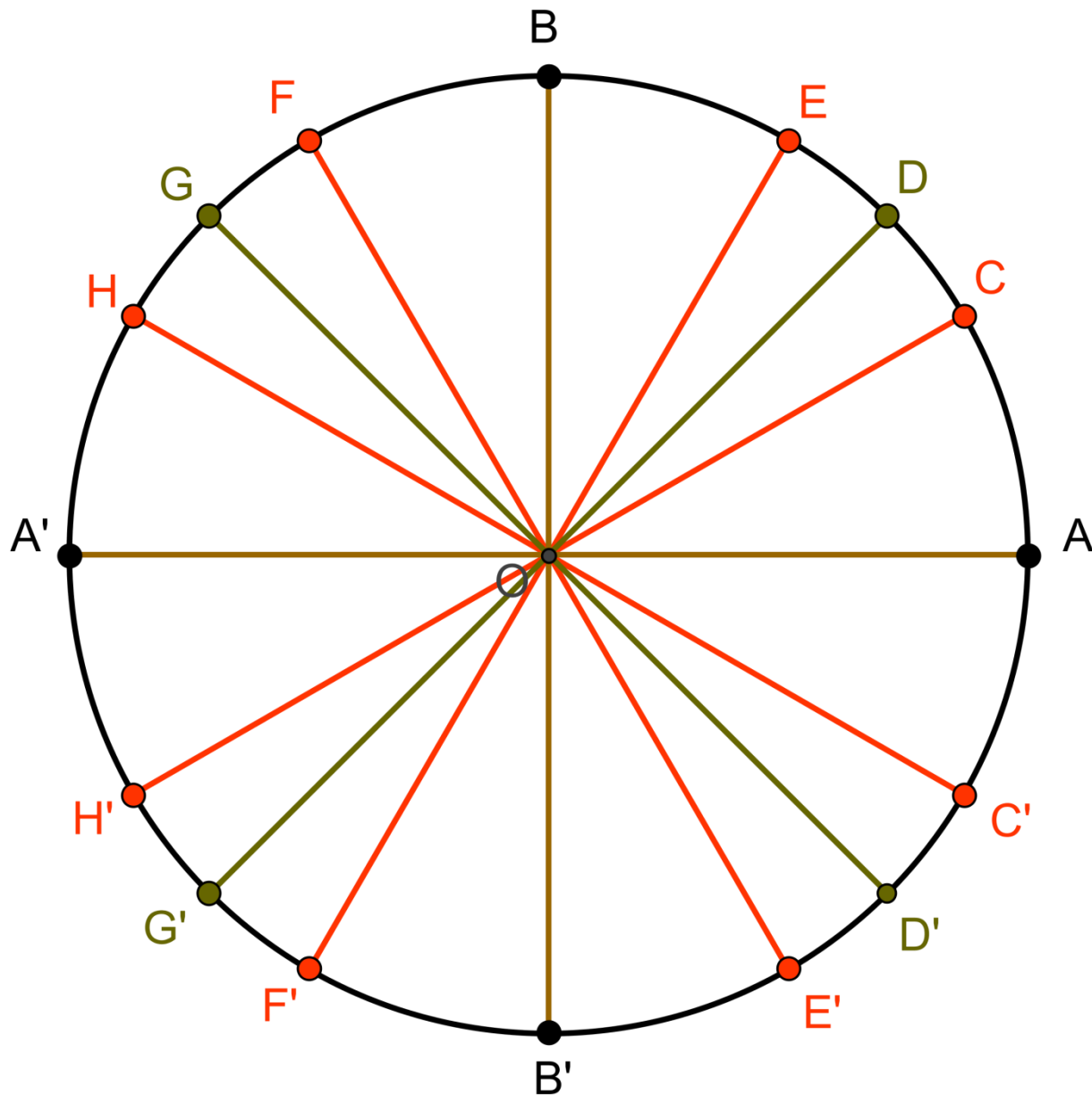
$$\frac{10\pi}{3}$$



Nº6

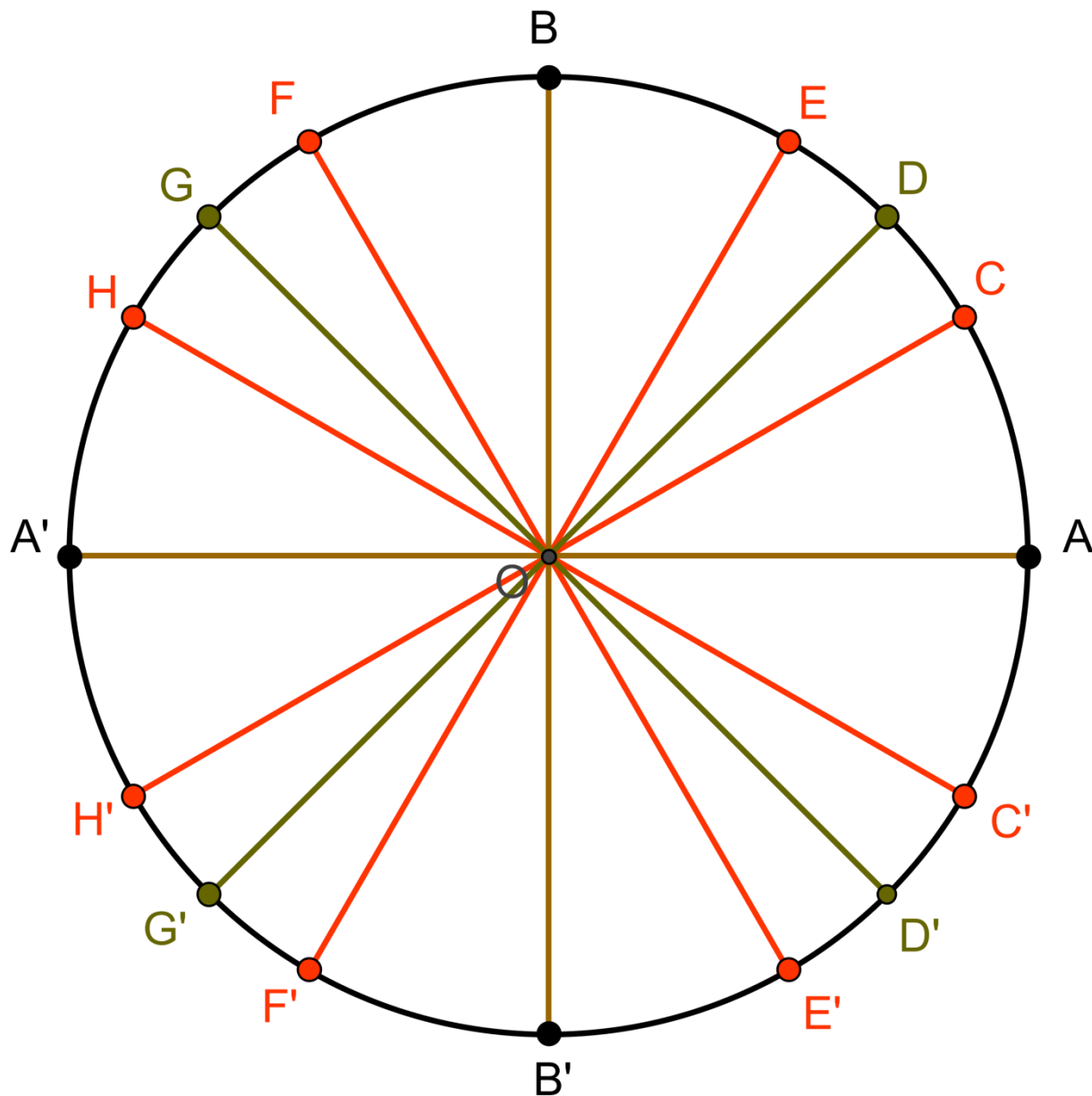
13π

3



Nº7

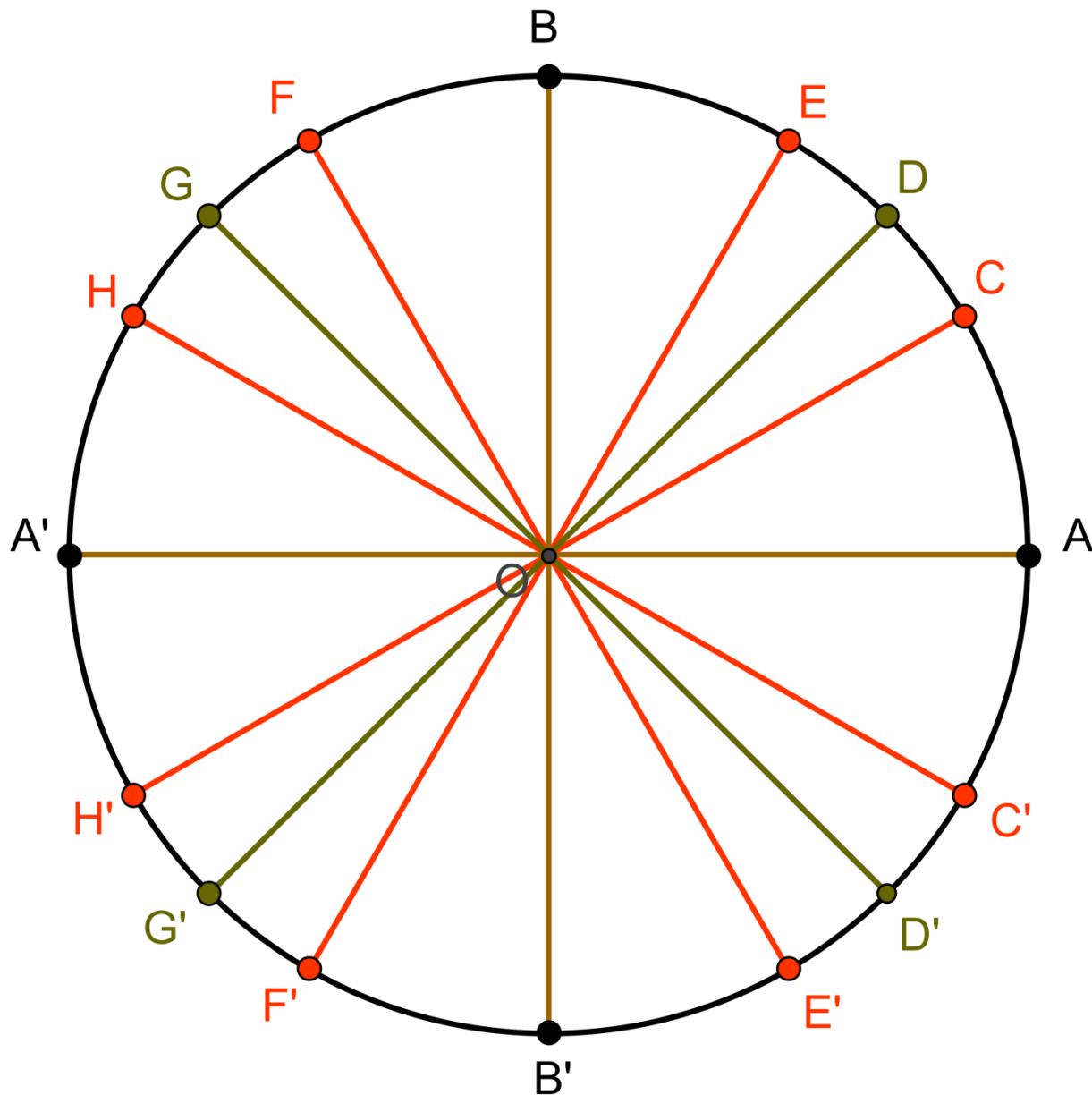
$$\frac{5\pi}{4}$$



Nº8

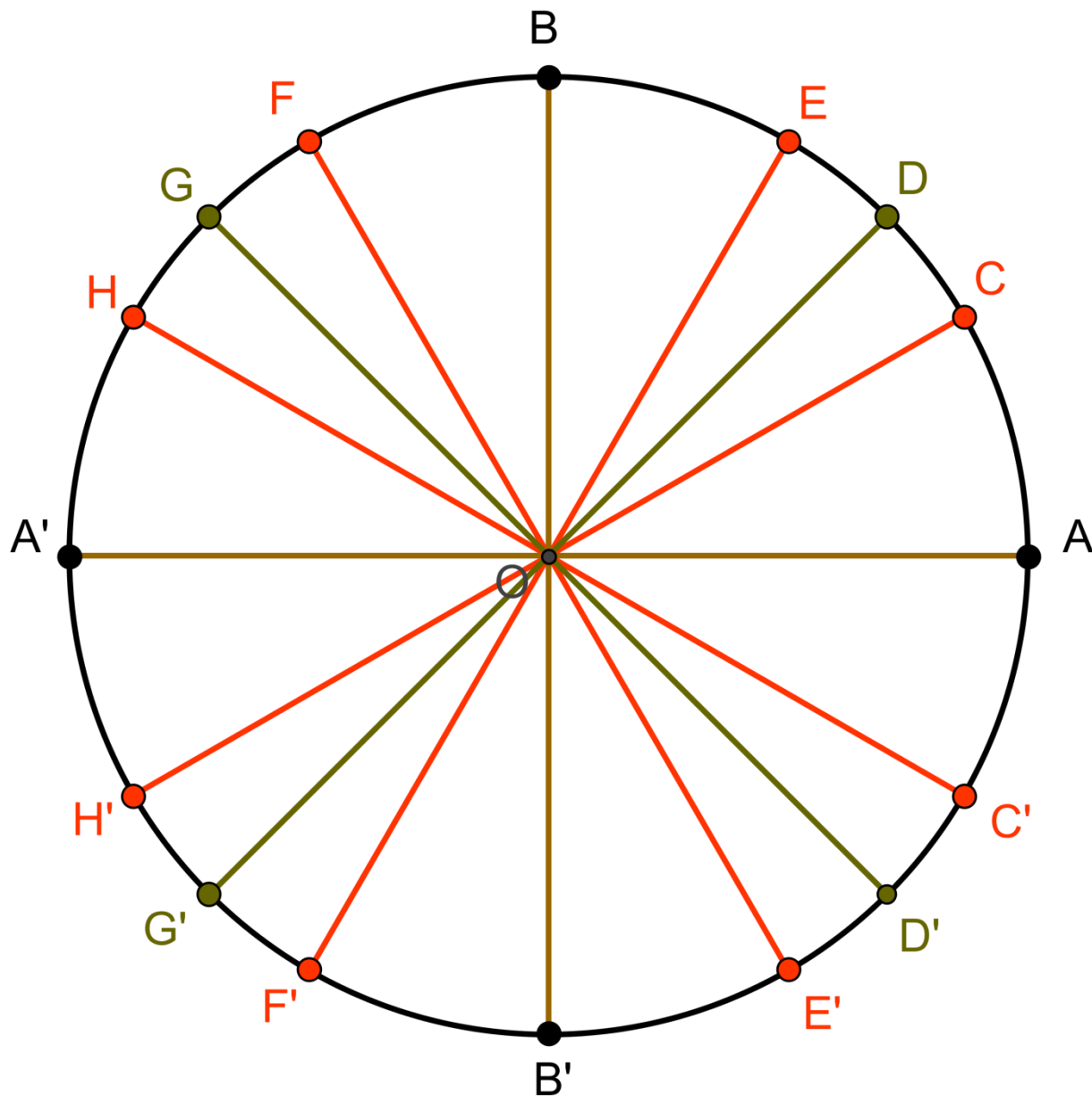
13π

$\frac{\quad}{4}$



Nº9

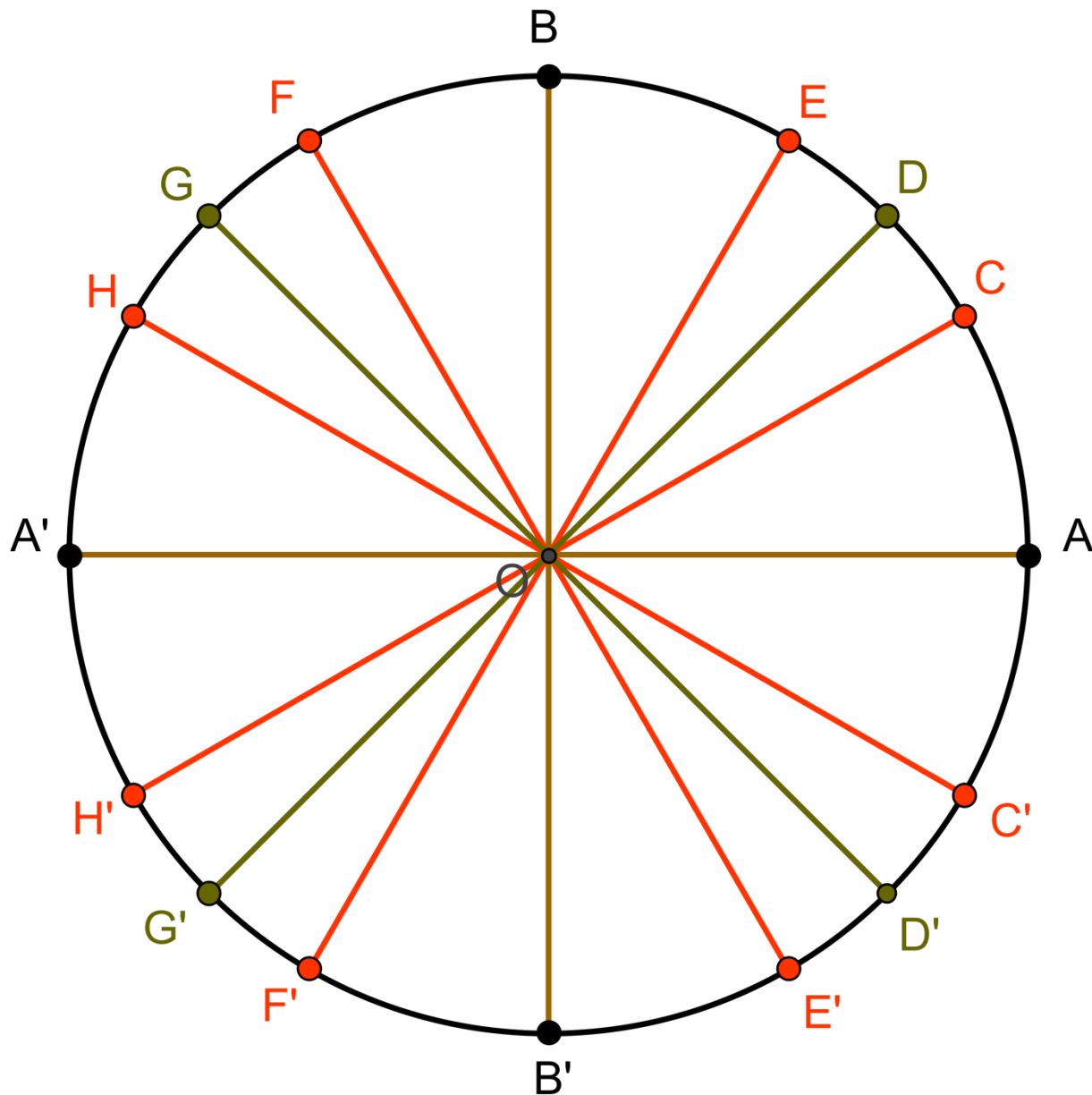
$$-\frac{7\pi}{6}$$



Nº10

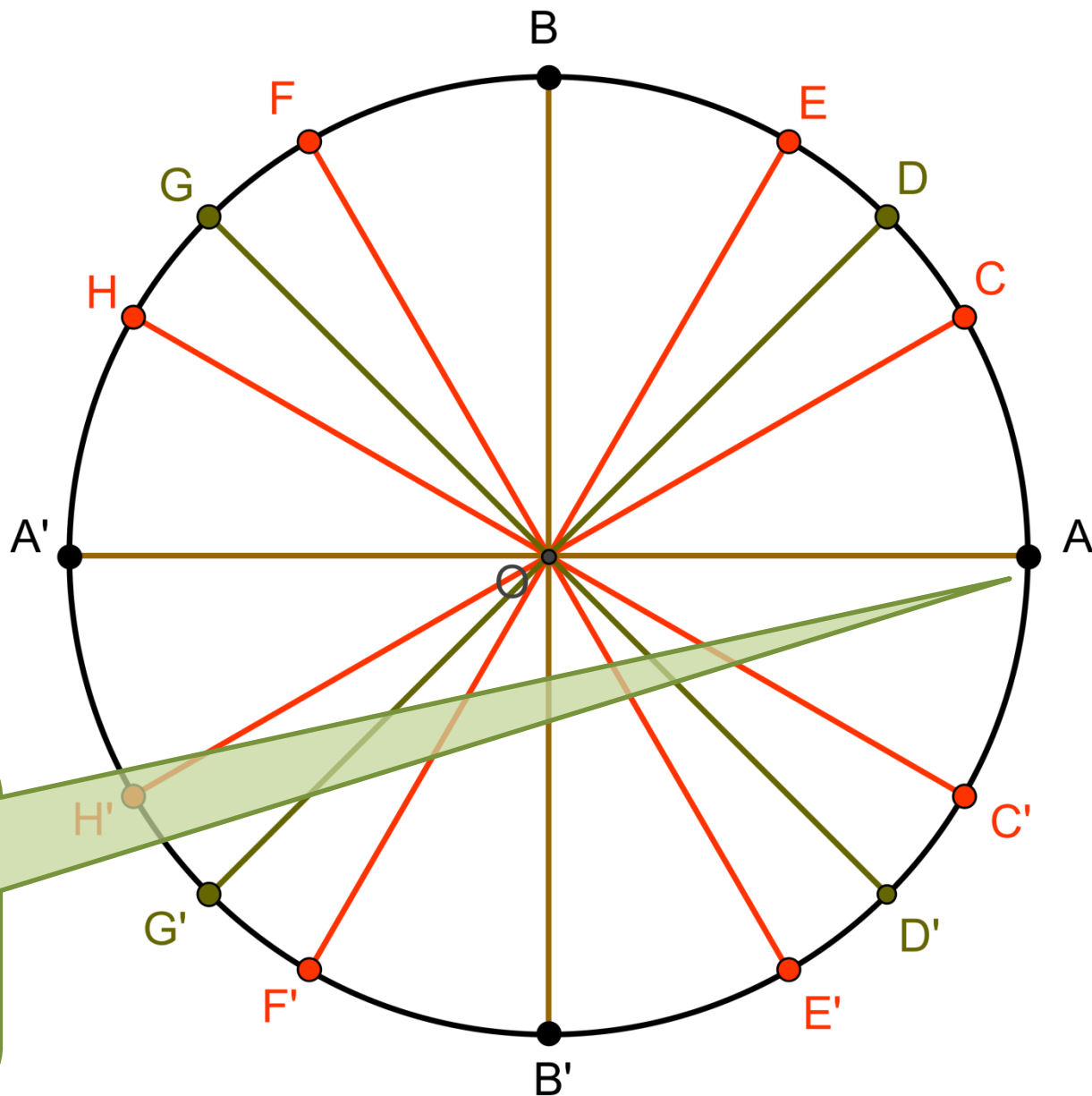
23π

6



Nº1

-60π

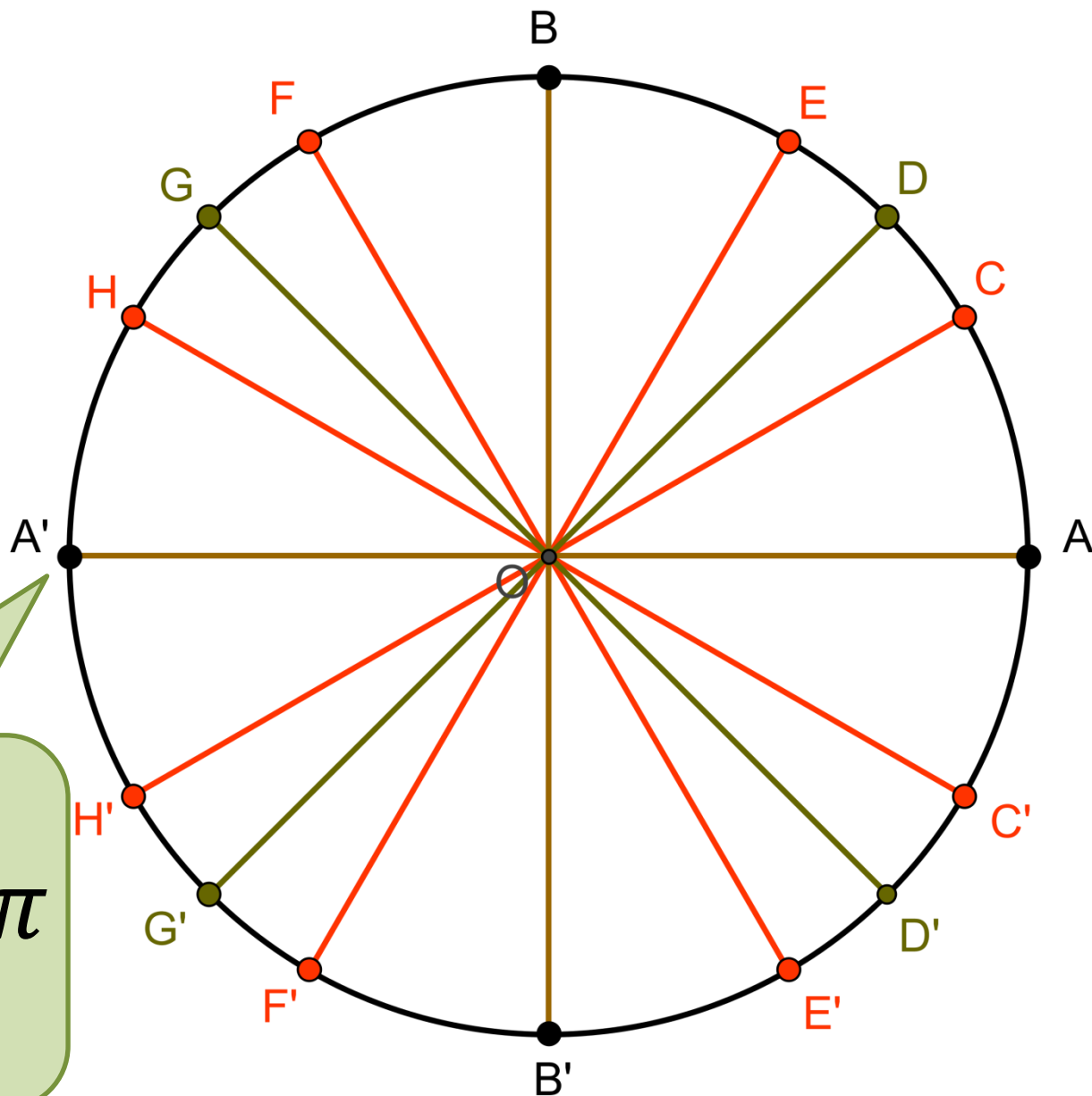


$-30 \times 2\pi$

Nº2

1013π

$\pi + 506 \times 2\pi$

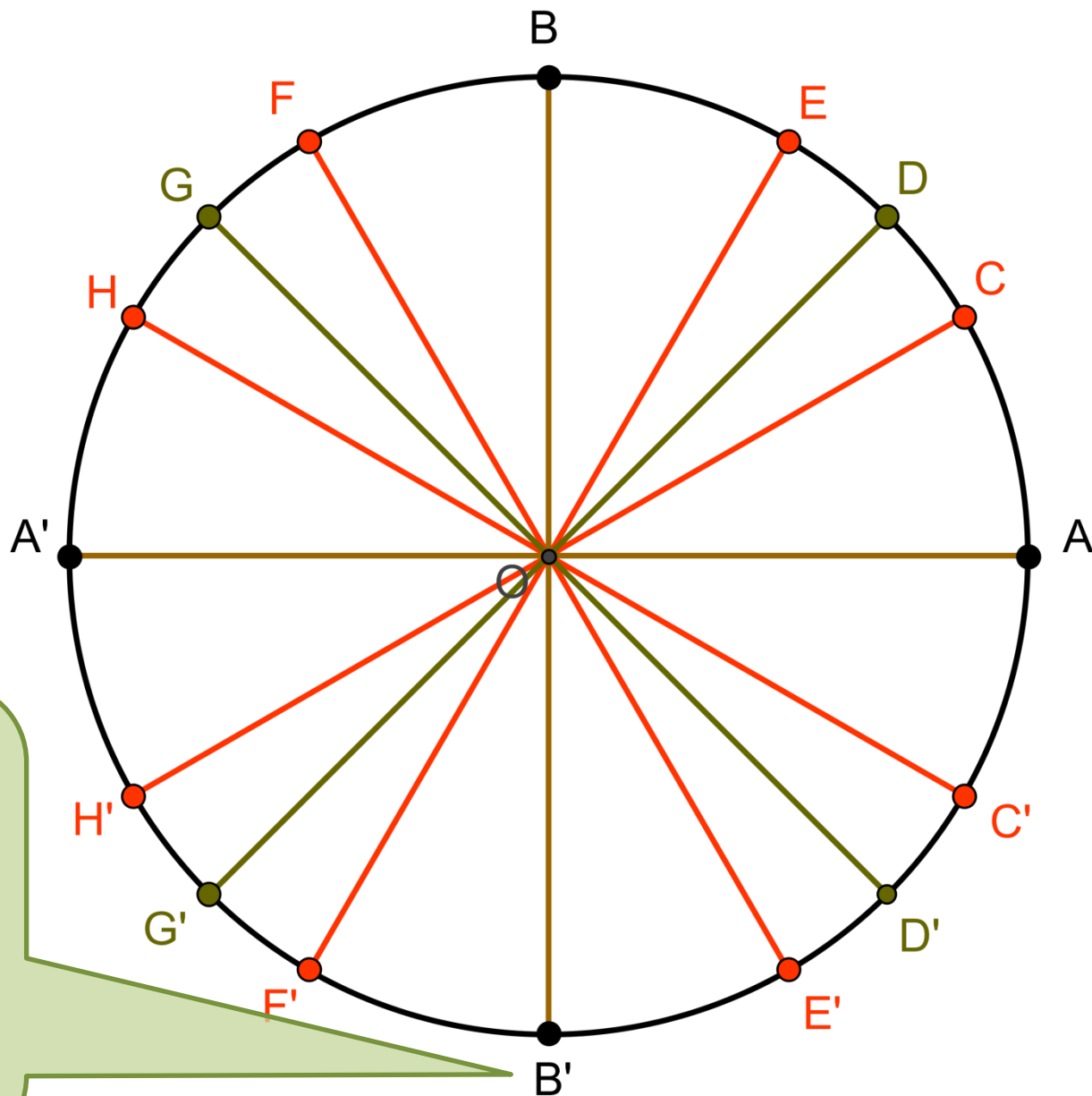


Nº3

$$\frac{9\pi}{6}$$

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

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



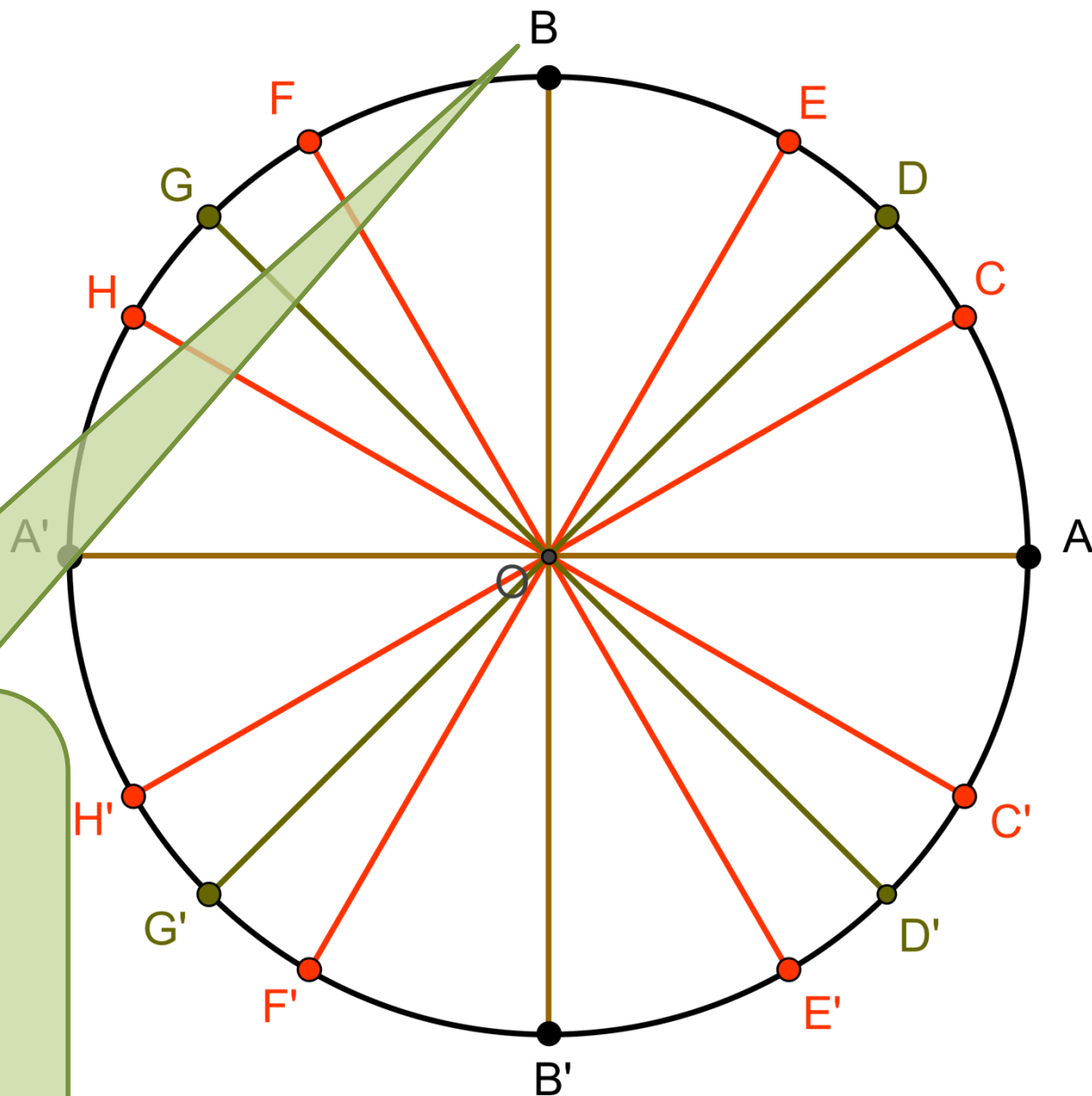
Nº4

$$47\pi$$

$$-\frac{\quad}{2}$$

$$-\frac{48\pi}{2} + \frac{\pi}{2}$$

$$= -24\pi + \frac{\pi}{2}$$

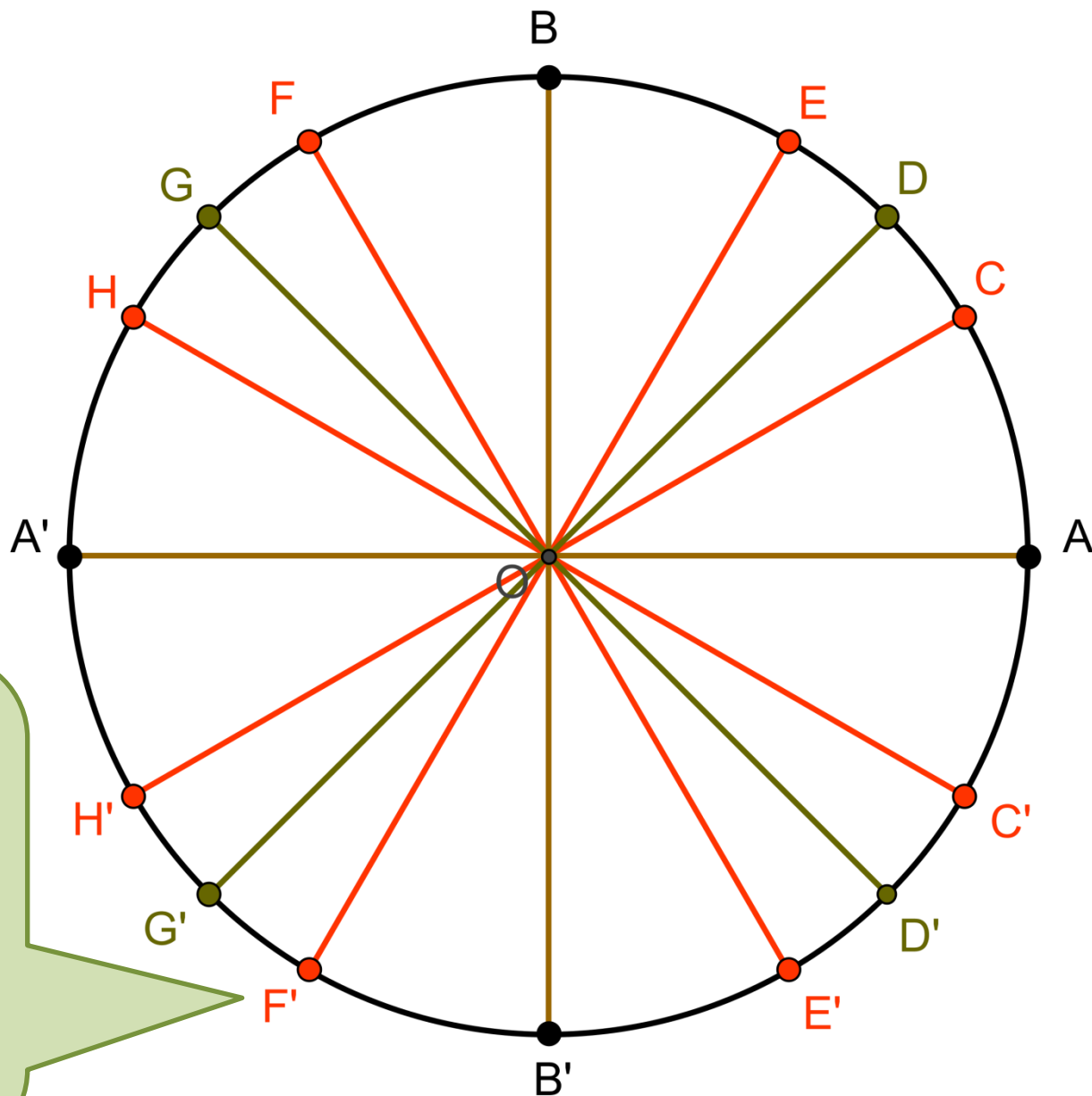


Nº5

$$\frac{10\pi}{3}$$

$$4\pi - \frac{2\pi}{3}$$

ou $3\pi + \frac{\pi}{3}$



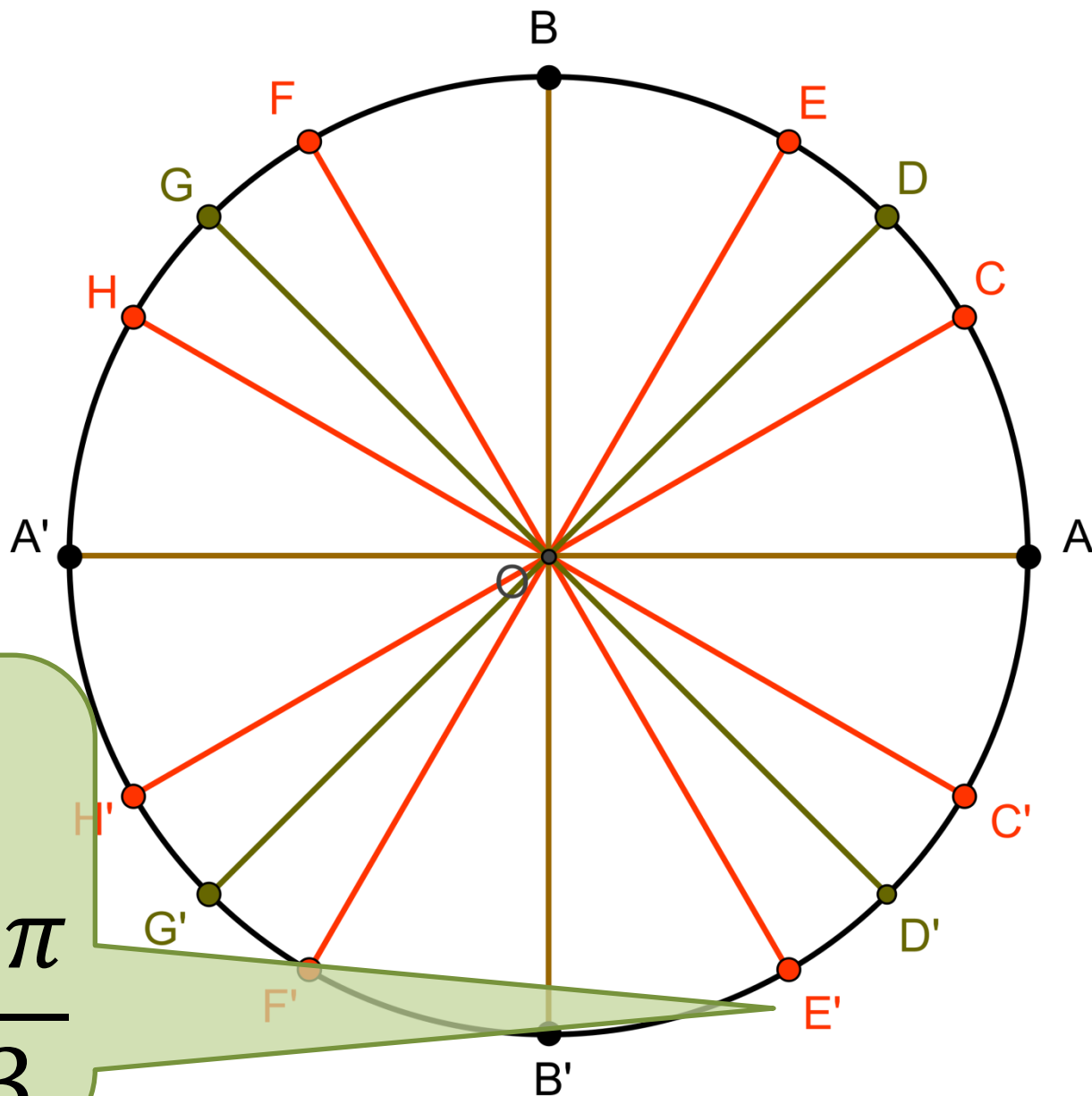
Nº6

13π

$-\frac{\quad}{3}$

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

ou $-5\pi + \frac{2\pi}{3}$



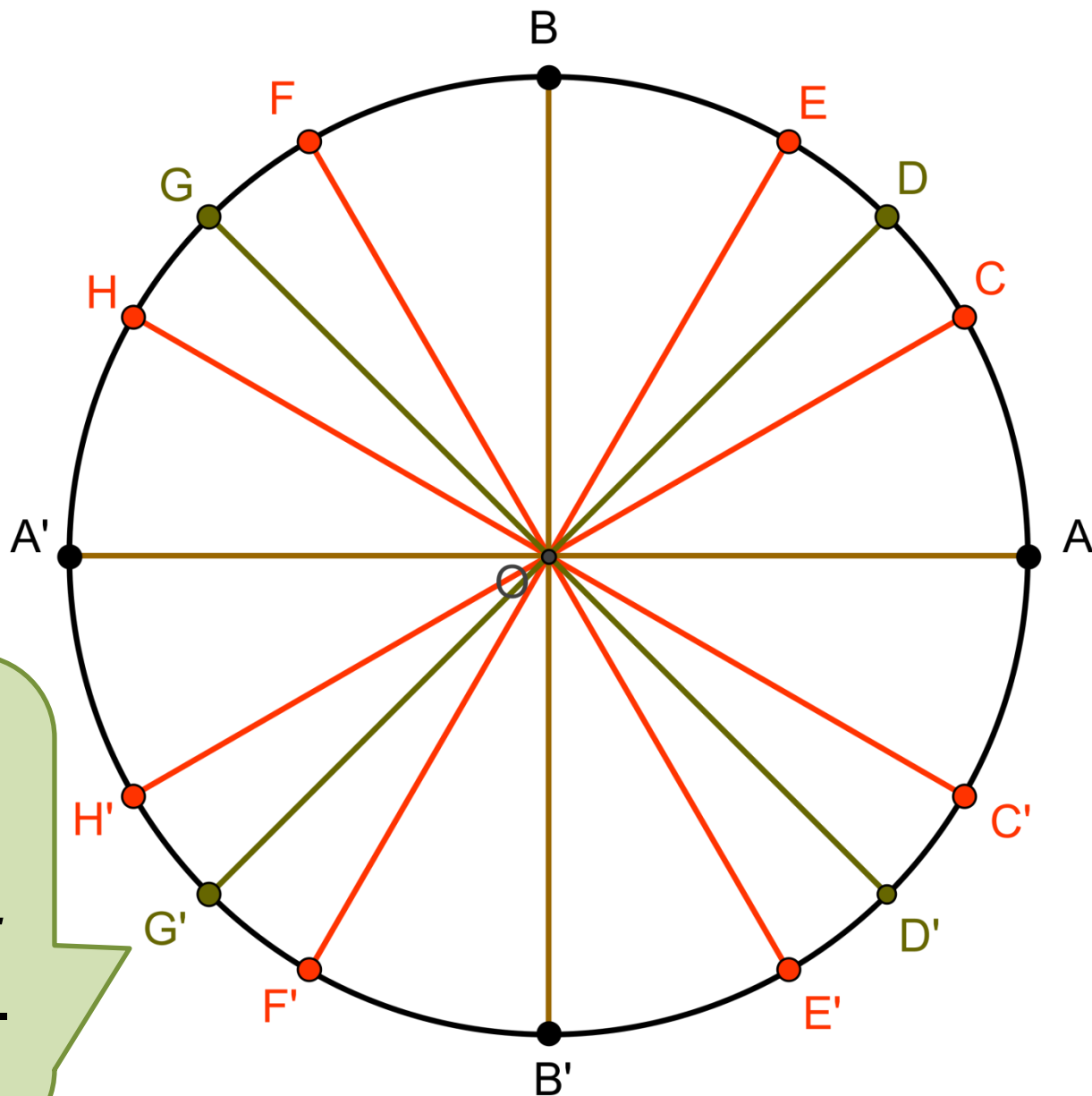
Nº7

5π

$\frac{4}{4}$

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

ou $2\pi - \frac{3\pi}{4}$



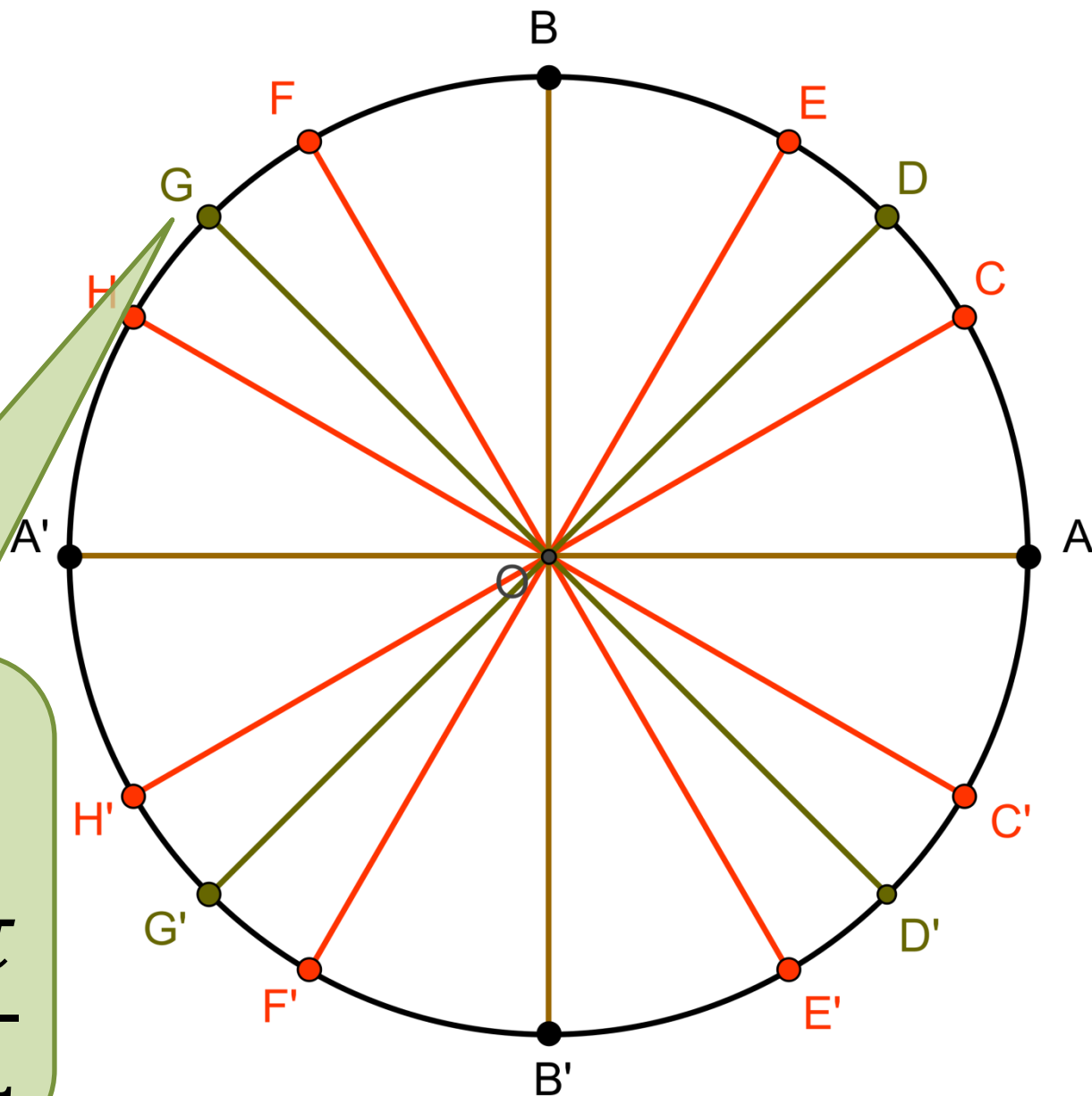
N°8

13π

4

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

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

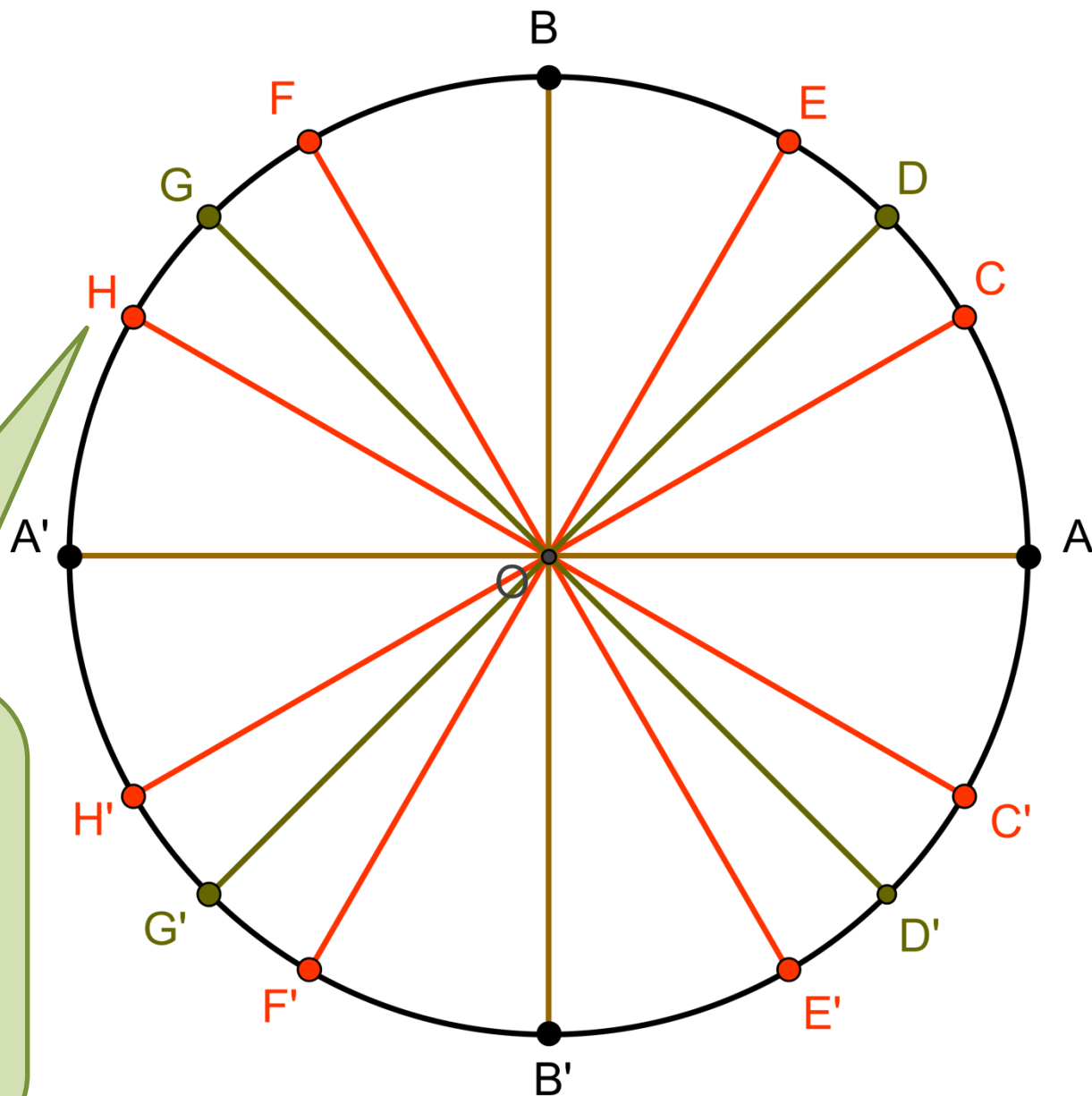


Nº9

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

$$-2\pi + \frac{5\pi}{6}$$

$$\text{ou } -\pi - \frac{\pi}{6}$$



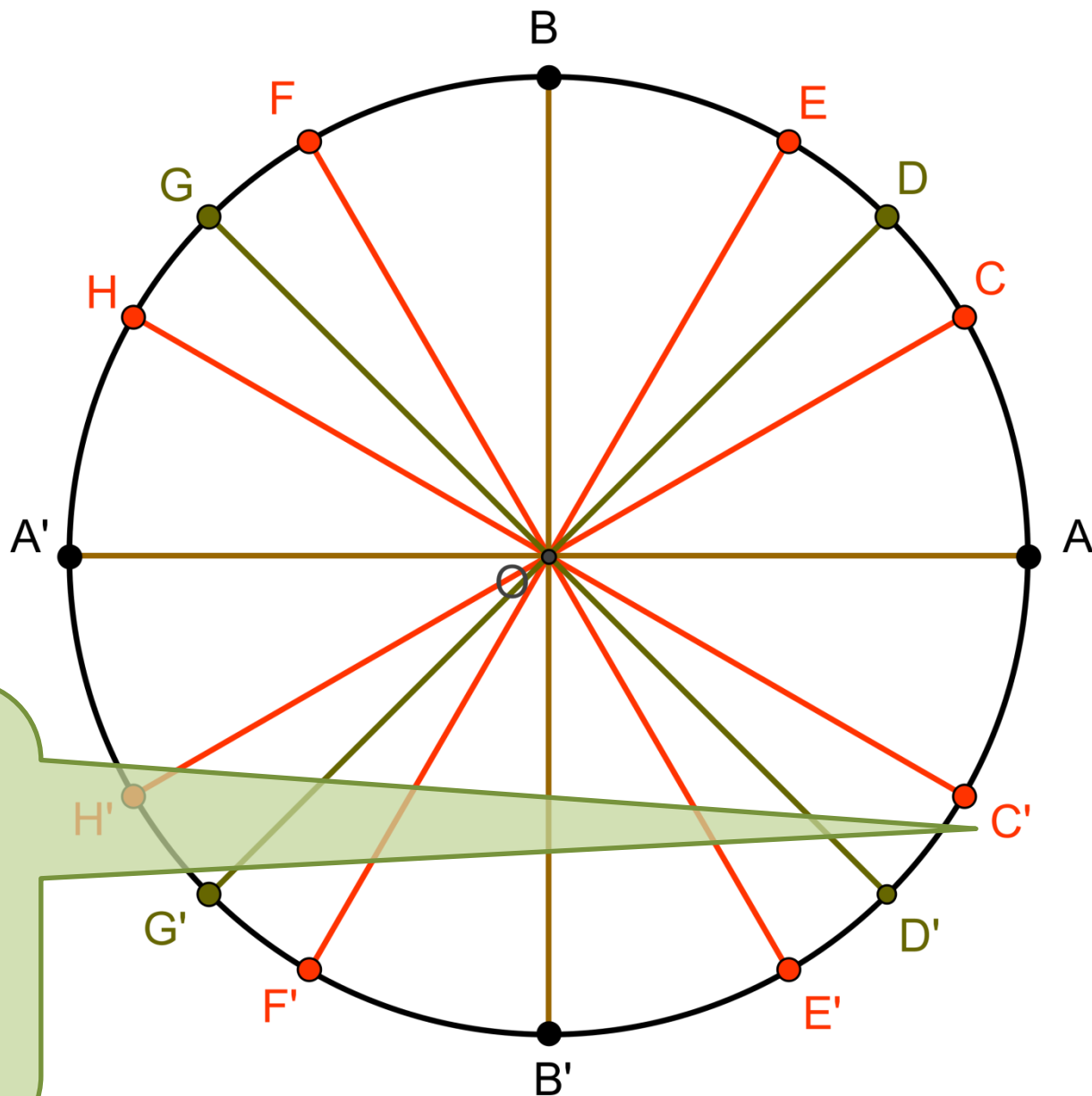
Nº10

23π

6

$$\frac{24\pi}{6} - \frac{\pi}{6}$$

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



FIN