

QCM d'autoévaluation, exercice 126 page 265

Sésamath

Maths TS obligatoire



énoncé

Le nombre complexe $z = -2 \left(\cos \left(\frac{\pi}{6} \right) - \sin \left(\frac{\pi}{6} \right) i \right)$ a pour argument :

- a) $-\frac{\pi}{6}$
- b) $\frac{\pi}{6}$
- c) $\frac{5\pi}{6}$
- d) $-\frac{5\pi}{6}$

correction

On a :

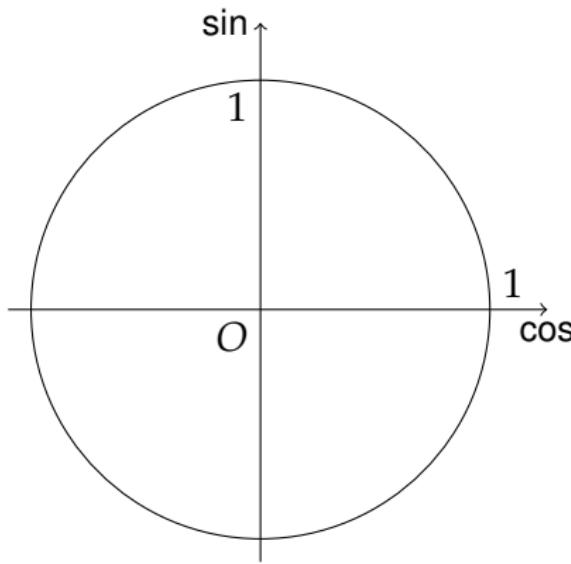
$$z = -2 \left(\cos \left(\frac{\pi}{6} \right) - \sin \left(\frac{\pi}{6} \right) i \right) = 2 \left(-\cos \left(\frac{\pi}{6} \right) + \sin \left(\frac{\pi}{6} \right) i \right)$$

correction

On a :

$$z = -2 \left(\cos \left(\frac{\pi}{6} \right) - \sin \left(\frac{\pi}{6} \right) i \right) = 2 \left(-\cos \left(\frac{\pi}{6} \right) + \sin \left(\frac{\pi}{6} \right) i \right)$$

Utilisons le cercle trigonométrique :

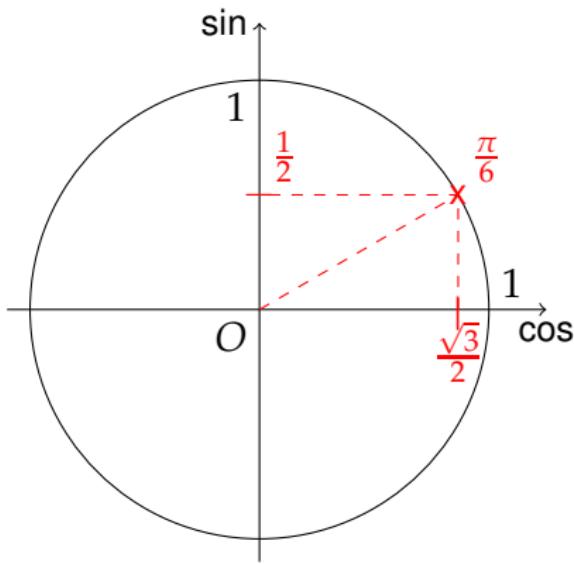


correction

On a :

$$z = -2 \left(\cos\left(\frac{\pi}{6}\right) - \sin\left(\frac{\pi}{6}\right)i \right) = 2 \left(-\cos\left(\frac{\pi}{6}\right) + \sin\left(\frac{\pi}{6}\right)i \right)$$

Utilisons le cercle trigonométrique :

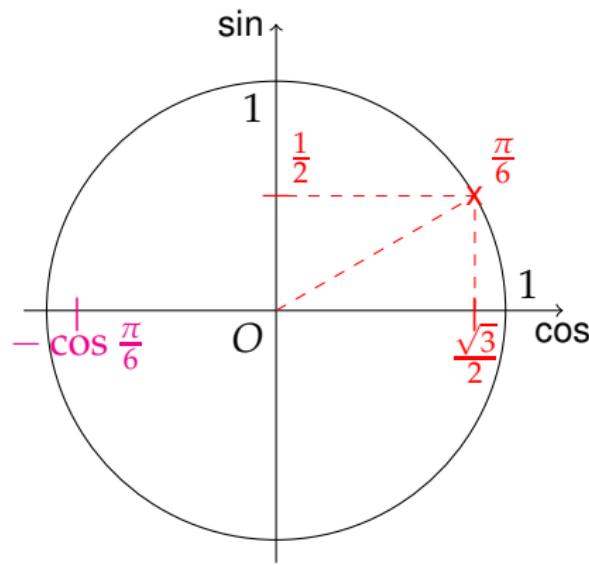


correction

On a :

$$z = -2 \left(\cos\left(\frac{\pi}{6}\right) - \sin\left(\frac{\pi}{6}\right)i \right) = 2 \left(-\cos\left(\frac{\pi}{6}\right) + \sin\left(\frac{\pi}{6}\right)i \right)$$

Utilisons le cercle trigonométrique :

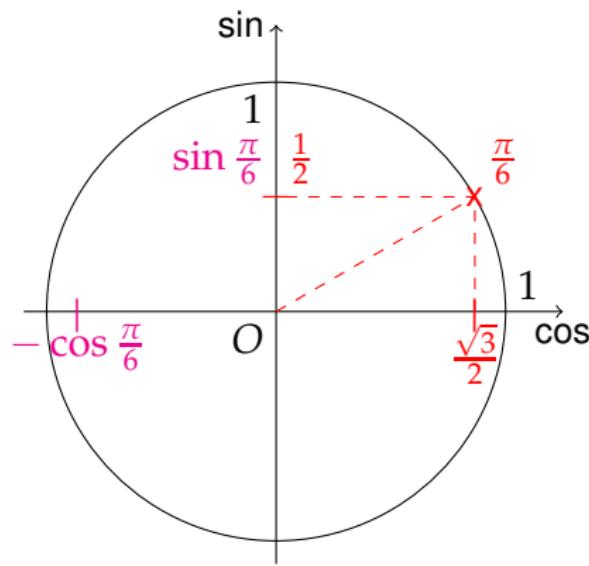


correction

On a :

$$z = -2 \left(\cos\left(\frac{\pi}{6}\right) - \sin\left(\frac{\pi}{6}\right)i \right) = 2 \left(-\cos\left(\frac{\pi}{6}\right) + \sin\left(\frac{\pi}{6}\right)i \right)$$

Utilisons le cercle trigonométrique :

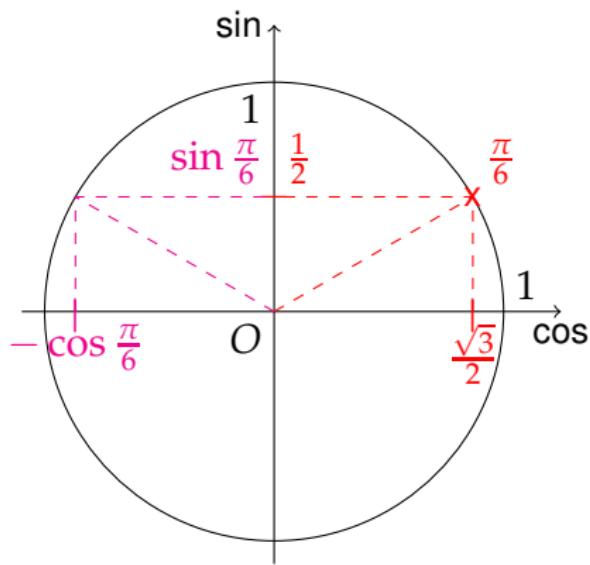


correction

On a :

$$z = -2 \left(\cos\left(\frac{\pi}{6}\right) - \sin\left(\frac{\pi}{6}\right)i \right) = 2 \left(-\cos\left(\frac{\pi}{6}\right) + \sin\left(\frac{\pi}{6}\right)i \right)$$

Utilisons le cercle trigonométrique :

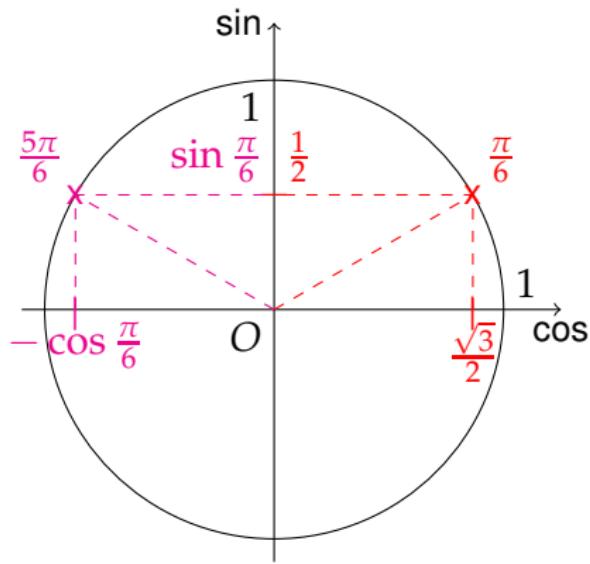


correction

On a :

$$z = -2 \left(\cos \left(\frac{\pi}{6} \right) - \sin \left(\frac{\pi}{6} \right) i \right) = 2 \left(-\cos \left(\frac{\pi}{6} \right) + \sin \left(\frac{\pi}{6} \right) i \right)$$

Utilisons le cercle trigonométrique :

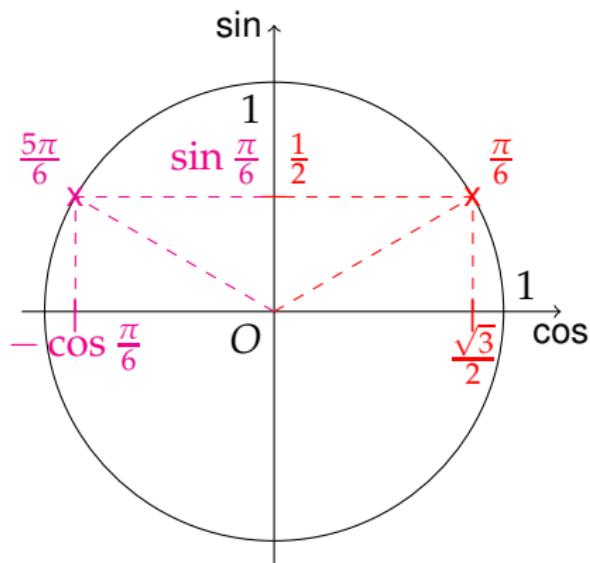


correction

On a :

$$z = -2 \left(\cos\left(\frac{\pi}{6}\right) - \sin\left(\frac{\pi}{6}\right)i \right) = 2 \left(-\cos\left(\frac{\pi}{6}\right) + \sin\left(\frac{\pi}{6}\right)i \right)$$

Utilisons le cercle trigonométrique :



réponse c)