

## Réponses du devoir surveillé de mathématiques n°5 - Sujet Droit

1.

$$\frac{2\pi}{3} \quad -\frac{5\pi}{7} \quad -\frac{\pi}{3} \quad \frac{2\pi}{9}$$

2.

$$S = (\cos x) + (-\sin x) + (-\cos x) + (\sin x) = 0$$

3.

$$S = ]\frac{7\pi}{4}; \frac{7\pi}{3}[$$

4.

$$A(2; -2\sqrt{3}) \quad B(2; -\frac{\pi}{3})$$

5.

$$(\overrightarrow{AB}, \overrightarrow{AD}) = (\overrightarrow{AB}, \overrightarrow{DC}) + (\overrightarrow{DC}, \overrightarrow{AD}) [2\pi] = (\overrightarrow{DC}, \overrightarrow{AD}) [2\pi] \quad \text{car} \quad (\overrightarrow{AB}, \overrightarrow{DC}) = 0 [2\pi]$$

$$(\overrightarrow{AB}, \overrightarrow{AD}) = (\overrightarrow{DC}, \overrightarrow{AD}) [2\pi] = (\overrightarrow{DC}, \overrightarrow{DA}) + \pi [2\pi] = -(\overrightarrow{DA}, \overrightarrow{DC}) + \pi [2\pi]$$

## Réponses du devoir surveillé de mathématiques n°5 - Sujet Gauche

1.

$$-\frac{2\pi}{3} \quad \frac{5\pi}{7} \quad \frac{\pi}{3} \quad -\frac{2\pi}{9}$$

2.

$$S = (-\sin x) + (-\cos x) + (\sin x) + (\cos x) = 0$$

3.

$$S = ]\frac{7\pi}{4}; \frac{9\pi}{4}[$$

4.

$$A(-2; 2\sqrt{3}) \quad B(2; \frac{2\pi}{3})$$

5.

$$(\overrightarrow{AB}, \overrightarrow{AD}) = (\overrightarrow{AB}, \overrightarrow{DC}) + (\overrightarrow{DC}, \overrightarrow{AD}) [2\pi] = (\overrightarrow{DC}, \overrightarrow{AD}) [2\pi] \quad \text{car} \quad (\overrightarrow{AB}, \overrightarrow{DC}) = 0 [2\pi]$$

$$(\overrightarrow{AB}, \overrightarrow{AD}) = (\overrightarrow{DC}, \overrightarrow{AD}) [2\pi] = (\overrightarrow{DC}, \overrightarrow{DA}) + \pi [2\pi] = -(\overrightarrow{DA}, \overrightarrow{DC}) + \pi [2\pi]$$