

تمرين 1

.1

 λ

:

$$\lambda_1 = 510^\circ ; \lambda_2 = \frac{-31\pi}{8}$$

$$\tan \varphi \text{ و } \sin \varphi \quad \cos \varphi = \frac{-\sqrt{3}}{3} \text{ و } \varphi \in \left] \frac{\pi}{2}; \pi \right] : .2$$

$$\tan \frac{123\pi}{4} ; \cos \frac{-13\pi}{26} ; \sin \frac{23\pi}{6} : .3$$

$$X = \cos\left(x + \frac{13\pi}{2}\right) + \sin(11\pi + x) + 2 \cos\left(\frac{17\pi}{2} - x\right) : .4$$

تمرين 2

$$(D_m) \quad (O, I, J)$$

$$A(-2,1) \text{ و } B(2,3) \text{ و } C(1,1) : \text{ و نعتبر النقط } (D_m): (2m-1)x + (5-m)y - 7m + 6 = 0 \quad / (m \in \mathbb{R})$$

$$\mathbf{C \quad B \quad A} \quad .1$$

$$: \quad \mathbf{m} \quad .2$$

$$\mathbf{C} \quad (D_m) \quad \textcircled{1}$$

$$(D_m) \quad \textcircled{2}$$

$$(D_m) \quad \textcircled{4} \quad (D_m) \quad \textcircled{3}$$

$$2x + 3y + 4 = 0 : \quad (D_m) \quad \textcircled{5}$$

$$(AB) \quad .3$$

$$\vec{u}(-1;3) \quad \mathbf{C} \quad (\Delta) \quad .4$$

$$\mathbf{AMCB} \quad M \quad .5$$

$$\mathbf{E} \quad (D_m) : \text{سؤال اختياري}$$

تمرين 3

$$-\sqrt{3} \tan x + 3 = 0 : \quad [0, 2\pi] \quad \mathbf{IR} \quad .1$$

$$4 \sin x + 1 > 3 : \quad I =]-\pi ; \pi] \quad .2$$

$$\Gamma(x) = -2 \sin^3 x - 5 \cos^2 x - \sin x + 3 : \quad \mathbf{IR} \quad \mathbf{x} \quad .3$$

$$\Gamma(x) = (1 - \sin x)(2 \sin^2 x - 3 \sin x - 2) : \quad \mathbf{IR} \quad \mathbf{x} \quad \checkmark$$

$$\Gamma(x) = 0 \quad [0, 2\pi] \quad \mathbf{IR} \quad \checkmark$$

$$|\cos x| \leq \frac{1}{2} : \quad I =]-\pi ; \pi] \quad \text{سؤال اختياري}$$