

السؤال الرابع :

$$f(x) = 4x^2(x+1) - 36(x+1)$$

بعوض بالد

$$f(-1) = 4(-1)^2(-1+1) - 36(-1+1)$$

$$f(-1) = 0$$

$$f(0) = 4(0)^2(0+1) - 36(0+1)$$

$$f(0) = -36$$

$$f(x) = 4x^2(x+1) - 36(x+1) \quad (2)$$

$$= (x+1)[4x^2 - 36]$$

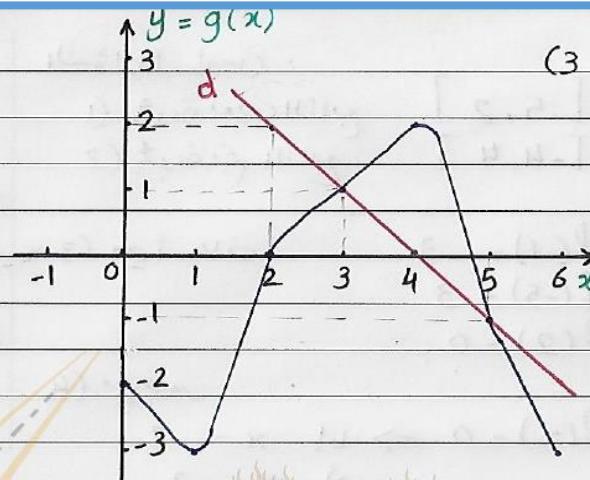
$$f(x) = (x+1)(2x-6)(2x+6)$$

$$\therefore (x+1)(2x-6)(2x+6) = 0$$

$$\therefore x+1=0 \Rightarrow x=-1$$

$$\therefore 2x-6=0 \Rightarrow 2x=6 \Rightarrow x=\frac{6}{2} \Rightarrow x=3$$

$$\therefore 2x+6=0 \Rightarrow 2x=-6 \Rightarrow x=-\frac{6}{2} \Rightarrow x=-3$$



د: $y = 4 - x$		
x	y	(x, y)
2	2	(2, 2)
4	0	(4, 0)

نقاط تفاصيل مع اذن الباحث للسابع في
 (3, 1)
 (5, -1)

حل أسئلة الامتحان التجاري الرابع

مادة الجبر (الوحدة الخامسة، التابع)

المدرس: لؤي الدمني

السؤال الأول:

C . 1

C . 2

b . 3

a . 4

السؤال الثاني:

1) علامة

2) علامة

3) حمل

4) حمل

السؤال الثالث:

$g(0) = -2$ (1)

$g(2) = 0$

$g(6) = -3$

طلب اذنها:

* أود بدقة مجموعات تعريف التابع $\{0, 6\}$ $\{x\}$ $\{x\}$ $\{x\}$

* أود بدقة مجموعات قيم التابع $\{-3, 2\}$ $\{y\}$ $\{y\}$ $\{y\}$

$g(x) = 2 \Rightarrow x = 4$ (2)

$g(x) = 0 \Rightarrow x = 2$

$g(x) = -3 \Rightarrow x = 1$

أو $x = 6$

السؤال السابع :

$$f(x) = (x-2)(2x+5) - 3(x-2)$$

$$g(x) = 2x^2 - 2x - 4$$

$$f(x) = 2x^2 + 5x - 4x - 10 - 3x + 6 \\ = 2x^2 - 2x - 4$$

$$\Rightarrow f(x) = g(x) \quad \text{دالة}$$

$$f(0) = 2(0)^2 - 2(0) - 4$$

$$f(0) = -4$$

$$f(2) = 2(2)^2 - 2(2) - 4 \\ = 8 - 4 - 4$$

$$f(2) = 0$$

السؤال السادس :

$$[-5, 2]$$

$$[-4, 4]$$

السؤال السادس :

1) مجموعة تعريف التابع

2) مجموعة قيم التابع

$$f(-1) = -3$$

$$f(-5) = 3$$

$$f(2) = 0$$

$$f(x) = 0 \Rightarrow \begin{cases} x = -2 \\ x = 2 \end{cases}$$

$$f(x) = 3 \Rightarrow \begin{cases} x = -3 \\ x = -5 \end{cases}$$

$$f(x) = 4 \Rightarrow x = -4$$

$$f(-4) = 4$$

$$f(x) = 0 \Rightarrow \begin{cases} x = -2 \\ x = 2 \end{cases}$$

$$f(x) = -3 \Rightarrow \begin{cases} x = -5 \\ x = -7 \end{cases}$$

$$f(x) = -5 \Rightarrow x = -9$$

$$f(x) = -7 \Rightarrow x = -11$$

$$f(x) = -9 \Rightarrow x = -13$$

$$f(x) = -11 \Rightarrow x = -15$$

$$f(x) = -13 \Rightarrow x = -17$$

$$f(x) = -15 \Rightarrow x = -19$$

$$f(x) = -17 \Rightarrow x = -21$$

$$f(x) = -19 \Rightarrow x = -23$$

$$f(x) = -21 \Rightarrow x = -25$$

$$f(x) = -23 \Rightarrow x = -27$$

$$f(x) = -25 \Rightarrow x = -29$$

$$f(x) = -27 \Rightarrow x = -31$$

$$f(x) = -29 \Rightarrow x = -33$$

$$f(x) = -31 \Rightarrow x = -35$$

$$f(x) = -33 \Rightarrow x = -37$$

$$f(x) = -35 \Rightarrow x = -39$$

$$f(x) = -37 \Rightarrow x = -41$$

$$f(x) = -39 \Rightarrow x = -43$$

$$f(x) = -41 \Rightarrow x = -45$$

$$f(x) = -43 \Rightarrow x = -47$$

$$f(x) = -45 \Rightarrow x = -49$$

$$f(x) = -47 \Rightarrow x = -51$$

$$f(x) = -49 \Rightarrow x = -53$$

$$f(x) = -51 \Rightarrow x = -55$$

$$f(x) = -53 \Rightarrow x = -57$$

$$f(x) = -55 \Rightarrow x = -59$$

$$f(x) = -57 \Rightarrow x = -61$$

$$f(x) = -59 \Rightarrow x = -63$$

$$f(x) = -61 \Rightarrow x = -65$$

$$f(x) = -63 \Rightarrow x = -67$$

$$f(x) = -65 \Rightarrow x = -69$$

$$f(x) = -67 \Rightarrow x = -71$$

$$f(x) = -69 \Rightarrow x = -73$$

$$f(x) = -71 \Rightarrow x = -75$$

$$f(x) = -73 \Rightarrow x = -77$$

$$f(x) = -75 \Rightarrow x = -79$$

$$f(x) = -77 \Rightarrow x = -81$$

$$f(x) = -79 \Rightarrow x = -83$$

$$f(x) = -81 \Rightarrow x = -85$$

$$f(x) = -83 \Rightarrow x = -87$$

$$f(x) = -85 \Rightarrow x = -89$$

$$f(x) = -87 \Rightarrow x = -91$$

$$f(x) = -89 \Rightarrow x = -93$$

$$f(x) = -91 \Rightarrow x = -95$$

$$f(x) = -93 \Rightarrow x = -97$$

$$f(x) = -95 \Rightarrow x = -99$$

$$f(x) = -97 \Rightarrow x = -101$$

$$f(x) = -99 \Rightarrow x = -103$$

$$f(x) = -101 \Rightarrow x = -105$$

$$f(x) = -103 \Rightarrow x = -107$$

$$f(x) = -105 \Rightarrow x = -109$$

$$f(x) = -107 \Rightarrow x = -111$$

$$f(x) = -109 \Rightarrow x = -113$$

$$f(x) = -111 \Rightarrow x = -115$$

$$f(x) = -113 \Rightarrow x = -117$$

$$f(x) = -115 \Rightarrow x = -119$$

$$f(x) = -117 \Rightarrow x = -121$$

$$f(x) = -119 \Rightarrow x = -123$$

$$f(x) = -121 \Rightarrow x = -125$$

$$f(x) = -123 \Rightarrow x = -127$$

$$f(x) = -125 \Rightarrow x = -129$$

$$f(x) = -127 \Rightarrow x = -131$$

$$f(x) = -129 \Rightarrow x = -133$$

$$f(x) = -131 \Rightarrow x = -135$$

$$f(x) = -133 \Rightarrow x = -137$$

$$f(x) = -135 \Rightarrow x = -139$$

$$f(x) = -137 \Rightarrow x = -141$$

$$f(x) = -139 \Rightarrow x = -143$$

$$f(x) = -141 \Rightarrow x = -145$$

$$f(x) = -143 \Rightarrow x = -147$$

$$f(x) = -145 \Rightarrow x = -149$$

$$f(x) = -147 \Rightarrow x = -151$$

$$f(x) = -149 \Rightarrow x = -153$$

$$f(x) = -151 \Rightarrow x = -155$$

$$f(x) = -153 \Rightarrow x = -157$$

$$f(x) = -155 \Rightarrow x = -159$$

$$f(x) = -157 \Rightarrow x = -161$$

$$f(x) = -159 \Rightarrow x = -163$$

$$f(x) = -161 \Rightarrow x = -165$$

$$f(x) = -163 \Rightarrow x = -167$$

$$f(x) = -165 \Rightarrow x = -169$$

$$f(x) = -167 \Rightarrow x = -171$$

$$f(x) = -169 \Rightarrow x = -173$$

$$f(x) = -171 \Rightarrow x = -175$$

$$f(x) = -173 \Rightarrow x = -177$$

$$f(x) = -175 \Rightarrow x = -179$$

$$f(x) = -177 \Rightarrow x = -181$$

$$f(x) = -179 \Rightarrow x = -183$$

$$f(x) = -181 \Rightarrow x = -185$$

$$f(x) = -183 \Rightarrow x = -187$$

$$f(x) = -185 \Rightarrow x = -189$$

$$f(x) = -187 \Rightarrow x = -191$$

$$f(x) = -189 \Rightarrow x = -193$$

$$f(x) = -191 \Rightarrow x = -195$$

$$f(x) = -193 \Rightarrow x = -197$$

$$f(x) = -195 \Rightarrow x = -199$$

$$f(x) = -197 \Rightarrow x = -201$$

$$f(x) = -199 \Rightarrow x = -203$$

$$f(x) = -201 \Rightarrow x = -205$$

$$f(x) = -203 \Rightarrow x = -207$$

$$f(x) = -205 \Rightarrow x = -209$$

$$f(x) = -207 \Rightarrow x = -211$$

$$f(x) = -209 \Rightarrow x = -213$$

$$f(x) = -211 \Rightarrow x = -215$$

$$f(x) = -213 \Rightarrow x = -217$$

$$f(x) = -215 \Rightarrow x = -219$$

$$f(x) = -217 \Rightarrow x = -221$$

$$f(x) = -219 \Rightarrow x = -223$$

$$f(x) = -221 \Rightarrow x = -225$$

$$f(x) = -223 \Rightarrow x = -227$$

$$f(x) = -225 \Rightarrow x = -229$$

$$f(x) = -227 \Rightarrow x = -231$$

$$f(x) = -229 \Rightarrow x = -233$$

$$f(x) = -231 \Rightarrow x = -235$$

$$f(x) = -233 \Rightarrow x = -237$$

$$f(x) = -235 \Rightarrow x = -239$$

$$f(x) = -237 \Rightarrow x = -241$$

$$f(x) = -239 \Rightarrow x = -243$$

$$f(x) = -241 \Rightarrow x = -247$$

$$f(x) = -243 \Rightarrow x = -251$$

$$f(x) = -247 \Rightarrow x = -259$$

$$f(x) = -251 \Rightarrow x = -263$$

$$f(x) = -259 \Rightarrow x = -271$$

$$f(x) = -263 \Rightarrow x = -283$$

$$f(x) = -271 \Rightarrow x = -303$$

$$f(x) = -283 \Rightarrow x = -323$$

$$f(x) = -303 \Rightarrow x = -343$$

$$f(x) = -323 \Rightarrow x = -363$$

$$f(x) = -343 \Rightarrow x = -383$$

$$f(x) = -363 \Rightarrow x = -403$$

$$f(x) = -383 \Rightarrow x = -423$$

$$f(x) = -403 \Rightarrow x = -443$$

$$f(x) = -423 \Rightarrow x = -463$$

$$f(x) = -443 \Rightarrow x = -483$$

$$f(x) = -463 \Rightarrow x = -503$$

$$f(x) = -483 \Rightarrow x = -523$$

$$f(x) = -503 \Rightarrow x = -543$$

$$f(x) = -523 \Rightarrow x = -563$$

$$f(x) = -543 \Rightarrow x = -583$$

$$f(x) = -563 \Rightarrow x = -603$$

$$f(x) = -583 \Rightarrow x = -623$$

$$f(x) = -603 \Rightarrow x = -643$$

$$f(x) = -623 \Rightarrow x = -663$$

$$f(x) = -643 \Rightarrow x = -683$$

$$f(x) = -663 \Rightarrow x = -703$$

$$f(x) = -683 \Rightarrow x = -723$$

$$f(x) = -703 \Rightarrow x = -743$$

$$f(x) = -723 \Rightarrow x = -763$$

$$f(x) = -743 \Rightarrow x = -783$$

$$f(x) = -763 \Rightarrow x = -803$$

$$f(x) = -783 \Rightarrow x = -823$$

$$f(x) = -803 \Rightarrow x = -843$$

$$f(x) = -823 \Rightarrow x = -863$$

$$f(x) = -843 \Rightarrow x = -883$$

السؤال الخامس :

$$t \mapsto 2t + 5$$

$$k(t) = 2t + 5$$

(1) بعزمي بال t

$$K(0) = 2(0) + 5$$

$$K(0) = 5$$

$$K\left(-\frac{5}{2}\right) = 2\left(-\frac{5}{2}\right) + 5$$

$$= -5 + 5$$

$$K\left(-\frac{5}{2}\right) = 0$$

(2) بعزمي بال $K(t)$

$$K(t) = 2t + 5$$

$$7 = 2t + 5$$

$$-2t = 5 - 7$$

$$-2t = -2$$

$$t = -\frac{2}{2}$$

$t = 1$

$$K(t) = 2t + 5$$

$$0 = 2t + 5$$

$$-2t = 5$$

$$\begin{aligned} y &= 2x + 3 \\ &= 2(-2) + 3 \\ &= -4 + 3 \end{aligned}$$

$$\boxed{y = -1}$$

بعوضى في (1)

$$f(x) = 2x + 3$$

$$f(0) = 2(0) + 3$$

$$f(0) = 3$$

السؤال (الإثنان):

$$f(-1) = 2(-1) + 3$$

$$= -2 + 3$$

$$f(-1) = 1$$

دالة الخطية $y = -2x - 1$ ممثلة بالخط

رسم الدالة خطية (4)

$$d: y = 2x + 3$$

x	y	(x, y)
0	3	(0, 3)
-1	1	(-1, 1)

Δ: y - x = 1 رسم الدالة خطية (3)

x	y	(x, y)
-1	0	(-1, 0)
-2	-1	(-2, -1)

$$f(x) = -1$$

$$2x + 3 = -1$$

$$2x = -1 - 3$$

$$2x = -4$$

$$x = \frac{-4}{2}$$

$$x = -2$$

$$\left\{ \begin{array}{l} d: y = 2x + 3 \\ \Delta: y - x = 1 \end{array} \right. \quad (3) \quad (2)$$

بعوضى في (2)

$$y - x = 1$$

$$2x + 3 - x = 1$$

$$x = 1 - 3$$

$$\boxed{x = -2}$$

إكمال السؤال الرابع:

$$2x^2 - 2x - 4 = -4 \quad (3)$$

$$2x^2 - 2x = -4 + 4$$

$$2x^2 - 2x = 0$$

$$x(2x - 2) = 0$$

لما

$$x = 0$$

أو

$$2x = 2$$

$$x = \frac{2}{2} \Rightarrow \boxed{x = 1}$$

$$f(x) = (x-2)(2x+5) - 3(x-2) \quad (4)$$

$$= (x-2)[2x+5-3]$$

$$f(x) = (x-2)(2x+2)$$

$$f(x) = 0$$

$$(x-2)(2x+2) = 0$$

$$x = 2$$

$$x-2=0 \quad \text{أو} \quad 2x+2=0$$

$$2x = -2 \Rightarrow x = -\frac{2}{2}$$

$$\boxed{x = -1}$$

$$f(3), f(0) \text{ احسب (1)}$$

$$f(0) = -1$$

$$f(3) = 2$$

$$f(x) = 1$$

$$\text{إذا } x = 2 \text{ أو } x = 4$$

عین اسلاف العدد 1

$$\text{السؤال العاشر: دورة 2021}$$

$$f(x) = \frac{1}{\sqrt{3}}x - \sqrt{3}$$

$$f(\sqrt{3}) = \frac{1}{\sqrt{3}}(\sqrt{3}) - \sqrt{3}$$

$$f(\sqrt{3}) = 1 - \sqrt{3}$$

$$f(x) = 0$$

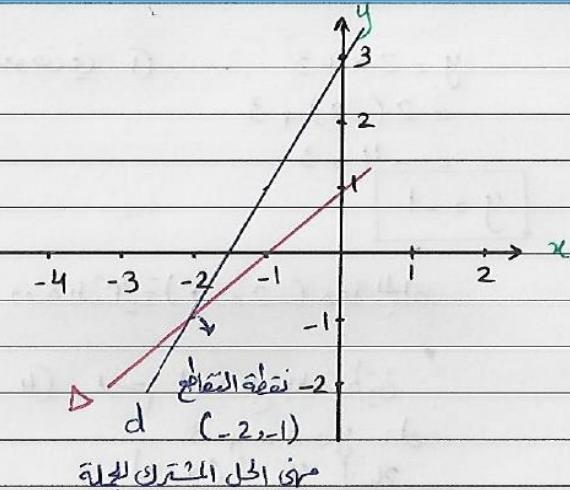
$$\frac{1}{\sqrt{3}}x - \sqrt{3} = 0$$

$$\frac{1}{\sqrt{3}}x = \sqrt{3}$$

$$x = \sqrt{3} \times \sqrt{3}$$

$$x = 3$$

انته حل المموجع



السؤال التاسع: دورة 2020

$$f(x) = 2x + 1$$

$$f(0) = 2(0) + 1$$

$$f(\frac{1}{2}) = 2(\frac{1}{2}) + 1$$

$$f(0) = 1$$

$$= 1 + 1$$

$$f(\frac{1}{2}) = 2$$

$$f(x) = 5$$

$$2x + 1 = 5$$

$$2x = 5 - 1 \Rightarrow 2x = 4$$

$$x = \frac{4}{2}$$

$$x = 2$$

السؤال (حادي عشر) دورة 2022

