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مربع x $۲ \times ۲ \times ۳$

$$(x - u)^v = 1$$

$$(x - y) = \pm 1$$

$$\Rightarrow \begin{cases} x = 1 \\ x = 4 \end{cases}$$

ب) $x^2 + 12x + 14 = 0 \xrightarrow{+9} x^2 + 12x + 14 = 9$

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خرج ٢ × ٢ × ٢

$$(x+r)^p = 9$$

$$(x + y) = +\mu \Rightarrow$$

$$\begin{cases} x = -1 \\ x = -5 \end{cases}$$

الف) $x^2 - 5x + 6 = 0 \Rightarrow (x - 3)(x - 2) = 0$

$$x = \mu$$

$$x = (y)$$

$$\text{ب) } x^2 - 5x - 14 = 0 \Rightarrow \underbrace{(x-7)}_{\checkmark} \underbrace{(x+2)}_{-7} = 0$$

$$x = \textcircled{V}$$

$$x = -1$$

$$\text{الف) } x^2 - 3x - 5 = 0 \Rightarrow \frac{+3 \pm \sqrt{9 - 4(-5)}}{2} \Rightarrow \left\{ \begin{array}{l} x = \frac{3 + \sqrt{29}}{2} \\ x = \frac{3 - \sqrt{29}}{2} \end{array} \right.$$

$$b) \quad Px^2 - Fx + \frac{1}{r} = 0 \Rightarrow \frac{F \pm \sqrt{1F - (Fx \frac{1}{r} \times x)}}{F} \left\{ \begin{array}{l} F \pm \sqrt{1F} \\ F \end{array} \right.$$

1 - $a > 0$ (تكون دالة موجبة) $b^2 - 4ac > 0 \rightarrow 9 - 4a > 0$ (الف)

$9 - (4a) > 0$ $\Rightarrow a < \frac{9}{4}$ (بأنه)

ب) $b^2 - 4ac = 0 \rightarrow 9 - 4a = 0$

$9 = 4a$

$a = \frac{9}{4}$

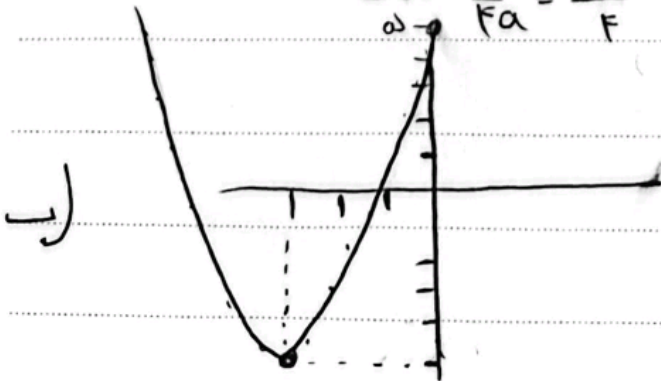
ج) $b^2 - 4ac < 0 \rightarrow 9 - 4a < 0$

$9 < 4a \Rightarrow a > \frac{9}{4}$

د) $b^2 - 4ac \geq 0 \rightarrow 9 - 4a \geq 0 \Rightarrow a \leq \frac{9}{4}$

$y = x^2 + 4x + a$

الف) $a > 0$ min $\begin{cases} x = -\frac{b}{2a} = -\frac{4}{2} = -2 \\ y = -\frac{\Delta}{4a} = -\frac{16 - 16}{4} = -1 \end{cases} \rightarrow \begin{cases} -2 \\ -1 \end{cases}$



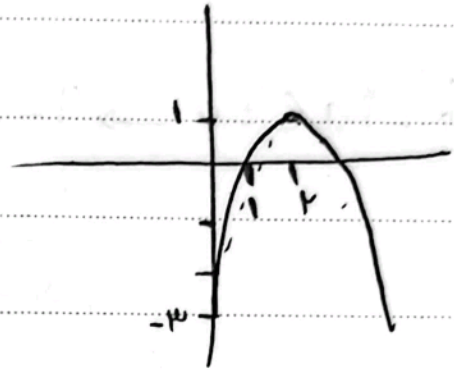
$$y = -x^2 + 4x - 3 \quad a < 0 \quad \max$$

-9.1

الف) $\begin{cases} x = \frac{-b}{2a} = \frac{-4}{-2} = 2 \\ y = \frac{-\Delta}{4a} = \frac{-16}{-4} = 4 \end{cases} \Rightarrow \begin{cases} 2 \\ 4 \end{cases}$

ب)

$$-x^2 + 4x - 3 \Rightarrow x^2 + 4x + 3$$



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

دائرتان

$$(x+1)(x+3)$$

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

الف) $S^2 - 2P \Rightarrow 9 - 2(-2) = 13$

$$S = \frac{-b}{a} = \frac{4}{-1} = -4$$

$$P = \frac{c}{a} = \frac{-3}{-1} = 3$$

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ب) $S^3 - 3SP \Rightarrow 27 - 3(4)(3) = 27 - 36 = -9$

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