

الف) $x^2 - 6x + 1 + 1 = 1 \Rightarrow (x-3)^2 = 1 \Rightarrow x-3 = \pm 1 \Rightarrow x = 2$
 $x = 4$

ب) $x^2 + 18x + 75 = 0 \xrightarrow{+9} (x+9)^2 = 9 \Rightarrow x+9 = \pm 3 \Rightarrow x = -6$
 $x = -12$

الف) $a+b = -5$
 $ab = 4 \Rightarrow (x-3)(x-2) \rightarrow x = 2$
 $x = 3$

ب) $a+b = -5$
 $ab = -12 \Rightarrow (x-7)(x+2) \rightarrow x = 7$
 $x = -2$

الف) $\Delta = 9 + 20 = 29$
 $x = \frac{3 \pm \sqrt{29}}{2}$

$x = \frac{-b \pm \sqrt{\Delta}}{2a}$
 $\Delta = b^2 - 4ac$

ب) $\Delta = 14$, $\varepsilon = 12$
 $x = \frac{\varepsilon \pm \sqrt{12}}{\varepsilon} \Rightarrow x = \frac{12 \pm \sqrt{12}}{12}$

الف) $x^2 - 3x + 2 = 0$ $p=3$
 $S=2 \Rightarrow (x-2)(x-1) \rightarrow x = 1$
 $x = 2$

$a+b+c=0 \Rightarrow x=1, \frac{c}{a}=2$

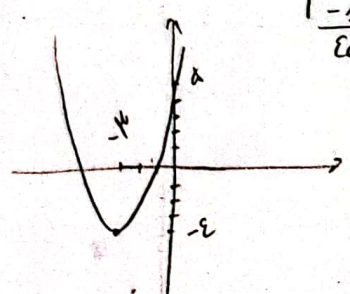
ب) $\varepsilon x^2 + x - 3$ $a+c=b$
 $\Rightarrow x = -1, \frac{c}{a} = \frac{3}{\varepsilon}$

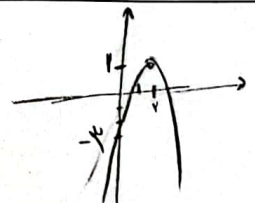
الف) $x^2 - 12x + 35 = 0 \Rightarrow x^2 - 12x + 35$ $p=12$
 $S=35 \Rightarrow (x-7)(x-5) \rightarrow x = 7$
 $x = 5$

ب) $3x^2 - 10x + 7 = 0 \Rightarrow x^2 - 10x + 21$ $p=10$
 $S=21 \Rightarrow (x-7)(x-3) \rightarrow x = 7$
 $x = 3$

الف) $2x - 12 \leq 13 \rightarrow 13 > 0$ ب) $1 - 14 \leq -12 \rightarrow -12 < 0$ پ) $14 - 14 \leq 0 \rightarrow 0 = 0$ ت) $1 - 12 \leq -11 \rightarrow -11 < 0$	$\Delta = b^2 - 4ac$ در صورت $+ \Delta$ دو ریشه " - " یک ریشه مضرب " 0 " آنگاه ا ریشه مضرب دارد	4
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الف) $a - 1a > 0 \rightarrow a > 1a \rightarrow \frac{a}{1} > a$ ب) $a - 1a = 0 \rightarrow \frac{a}{1} = a$ 2) $a - 1a < 0 \rightarrow \frac{a}{1} < a$ 3) $\frac{a}{1} \geq a$	7
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الف) $\oplus x^2 + 4x + 1 \Rightarrow \min \left \frac{b}{2a} = \frac{-4}{2} = -2 \right.$ $\left. \frac{-\Delta}{4a} = -1 \right.$ ب) 	1
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الف) $\text{ext} \left \frac{b}{2a} \right.$ $\left. \frac{-\Delta}{4a} \right.$ $\text{max} \left \frac{b}{2a} \right.$ $\left. \frac{-\Delta}{4a} \right.$ ب) $a + b + c = 0 \Rightarrow x = 1$ $x = 3$		9
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$S = 3 \quad P = -2$ الف) $a - 2(-2) = 12$ ب) $2V - 3(3)(-2) = 2V - (-12) = 12$	10
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