

الف ، $(x-4)(x-7) = 0 \rightarrow x=4$
 $\rightarrow x=7$

5

ب ، $(x+7)(x-4) = 0 \rightarrow x = -7$
 $\rightarrow x = +4$

الف ، $x^2 - 12x + 36 = 0 \rightarrow (x-6)(x-6) = 0 \rightarrow x = \frac{6}{3} = 2$
 $x = \frac{6}{3} = 2$

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ب ، $x^2 - 10x + 21 = 0 \rightarrow (x-3)(x-7) = 0 \rightarrow x = \frac{3}{1} = 3$
 $x = \frac{7}{1} = 7$

الف ، $a+b+c = 0 \rightarrow x = +1$
 $x = \frac{c}{a} = \frac{3}{1}$

2, $\Delta = 20 - 1 = 19$

$x = \frac{a \pm \sqrt{\Delta}}{2} \rightarrow x = \frac{a + \sqrt{19}}{2}$
 $x = \frac{a - \sqrt{19}}{2}$

5

ب ، $a+c = b \rightarrow x = -1$
 $x = \frac{-c}{a} = -\frac{3}{1}$

3, $\Delta = 49 - 144 = -95 \rightarrow$ دلتا منفی پس
 ریشه ندارد

الف ، $\left(\frac{-(-3)}{1}\right)^2 - 2 \times \frac{-2}{1} = 9 + 4 = 13$

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

$P = \frac{c}{a}$

ب ، $\left(\frac{3}{1}\right)^2 - 2 \times \frac{3}{1} \times \frac{-2}{1} = 9 + 12 = 21$

الف ، $\frac{4 \times 4^3}{4} + \frac{9 \times 1^4}{1} = 21 + 9 = 30$

$\begin{pmatrix} 4 \\ 9 \end{pmatrix} = \begin{pmatrix} 4 \\ 9 \end{pmatrix}$

ب ، $\frac{9 \times 1^4 \times 4}{4 \times 4} - \frac{1 \times 4}{1} = 9 - 4 = 5$