

نام و نام خانوادگی ابراهیم / ابوالحسن پاسخنامه تشریحی تکلیف شماره ۱ کلاس (۹۰)

$$x^2 - 4x + 4 = 0 \xrightarrow{+1} x^2 - 4x + 4 = 1 \rightarrow (x-2)^2 = 1$$

$$x-2 = \pm 1 \rightarrow x=3 \quad x=1$$

$$x^2 + 4x + 7 = 0 \xrightarrow{+4} x^2 + 4x + 16 = 9 \quad (x+4)^2 = 9$$

$$x+4 = \pm 3 \quad \boxed{x=-7} \quad \boxed{x=-1}$$

$$x^2 - 5x + 4 = 0 \quad (x-4)(x-1) = \boxed{x=4} \quad \boxed{x=1}$$

$$x^2 - 5x - 14 = 0 \quad (x+2)(x-7) \Rightarrow \boxed{x=-2} \quad \boxed{x=7}$$

$$x^2 - 2x - 5 = 0 \quad \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{2 \pm \sqrt{4+20}}{2} = \frac{2 \pm \sqrt{24}}{2} = \frac{2 \pm 2\sqrt{6}}{2} = 1 \pm \sqrt{6}$$

غلط قق زیر را محال منفی نمی شود

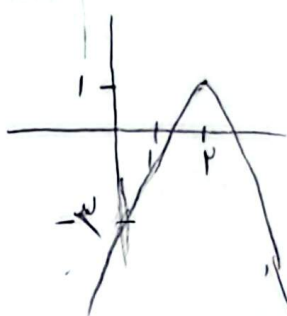
$$x^2 - 5x + \frac{1}{2} = 0 \quad \frac{5 \pm \sqrt{25-2}}{2} = \frac{5 \pm \sqrt{23}}{2} \quad \frac{5 - \sqrt{23}}{2}$$

$$x^2 - 2x + 2 = 0 \quad a+c = -b \Rightarrow \boxed{x=1} \quad x = \frac{c}{a} = \boxed{2}$$

$$x^2 + x - 5 = 0 \quad x^2 + x - 14 = 0 \quad (x+4)(x-3) = \boxed{x = -\frac{4}{3} = -1} \quad \boxed{x = \frac{3}{4}}$$

$$5x^2 - 12x + 7 = 0 \quad x^2 - 12x + 35 = 0 \quad (x-7)(x-5) \quad \boxed{x = \frac{7}{5}} \quad \boxed{x = \frac{5}{7} = 1}$$

$$x^2 - 10x + 7 = 0 \quad x^2 - 10x + 21 = 0 \quad (x-7)(x-3) \quad \boxed{x = \frac{7}{3} = 1} \quad \boxed{x = \frac{3}{7}}$$

الف) $-n^2 + \omega n - 1 = 0 \rightarrow \frac{\omega \pm \sqrt{\omega^2 - 4}}{-2}$ $\frac{\omega \pm \sqrt{14}}{-2}$ ب) $n^2 - n + 2 = 0$ $\frac{1 \pm \sqrt{1-8}}{2}$ $\frac{1 \pm \sqrt{-7}}{2}$ $\rightarrow$ قيم منفي لا يمكن ان يكون ج) $n^2 - 4n + 2 = 0$ $\frac{4 \pm \sqrt{16-8}}{2}$ $\frac{4 \pm \sqrt{8}}{2}$ $\rightarrow$ قيم حقيقيه د) $n^2 - n + 1 = 0$ $\frac{1 \pm \sqrt{1-4}}{2}$ $\frac{1 \pm \sqrt{-3}}{2}$ $\rightarrow$ قيم منفي لا يمكن ان يكون	6
الف) $\frac{9 \pm \sqrt{9-4a}}{4}$ $9-4a > 0$ $a < \frac{9}{4}$ $n^2 - 4n + a = 0$ ب) $9-4a = 0$ $a = \frac{9}{4}$ ج) $9-4a < 0$ $a > \frac{9}{4}$ د) $9-4a > 0$ $a \leq \frac{9}{4}$	7
الف) $\min_{a>0} \left \frac{-b}{2a} \right = \frac{-4}{2} = -2$ $y = x^2 + 4x + a$ ب) 	8
الف) $\max \left \frac{-b}{2a} \right = \frac{-4}{-2} = 2$ $y = -x^2 + 4x - 3$ ب) $-x^2 - 4x - 3 = 0$ $x = 1$ $x = 3$ $(1, 0)$ $(3, 0)$ 	9
الف) $5^p - 2p = 9 - 4 = 5$ $p = \frac{c}{a} = \frac{-2}{1} = -2$ $S = \frac{b}{a} = \frac{-3}{1} = -3$ ب) $5^p - 4Sp = 2p - 1 = 1$ 4ω	10