

نام و نام خانوادگی شایسته پاسخنامه تشریحی تکلیف شماره ۱۲... کلاس... دبیر... A

الف) $\min \left| -\frac{b}{a} = \frac{2}{1} = 2 \right|$

$\left| \frac{1}{2} \right| \left| \frac{2}{1} \right| \left| \frac{3}{1} \right|$

ب) $\max \left| -\frac{b}{a} = \frac{2}{1} = 2 \right|$

$\left| \frac{1}{2} \right| \left| \frac{2}{1} \right| \left| \frac{3}{1} \right|$

$\frac{-2 \pm \sqrt{4-4}}{1-1}$

الف) $\Delta > 0 \rightarrow (m+1)^2 - 2(m+1) > 0 \rightarrow m^2 + 2m - 2m - 2 > 0 \rightarrow m^2 - 2 > 0 \rightarrow (m+\sqrt{2})(m-\sqrt{2}) > 0 \rightarrow m < -\sqrt{2} \text{ or } m > \sqrt{2}$

ب) $\Delta = 0 \rightarrow m^2 - 2m - 2 = 0 \rightarrow (m+1)(m-3) = 0 \rightarrow m < -1 \text{ or } m > 3$

ج) $\Delta < 0 \rightarrow (m+1)(m-3) < 0 \rightarrow \frac{-1}{-1-1} < m < \frac{3}{1-1} \rightarrow -1 < m < 3$

د) $\Delta > 0 \rightarrow (m+1)(m-3) < 0 \rightarrow m < -1 \text{ or } m > 3$

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الف) $S < 0 \rightarrow -\frac{b}{a} < 0 \rightarrow \frac{2m+1}{m-1} < 0 \rightarrow \frac{-1}{-1-1} < m < \frac{1}{1-1} \rightarrow -1 < m < 1$

$\Delta > 0 \rightarrow (2m+1)^2 - 2(m-1) > 0 \rightarrow 4m^2 + 4m + 1 - 2m + 2 > 0 \rightarrow 4m^2 + 2m + 3 > 0 \rightarrow x_{2,3} \in \mathbb{R}$

ب) $S < 0 \rightarrow -\frac{b}{a} < 0 \rightarrow \frac{2m+1}{m-1} < 0 \rightarrow -1 < m < 1$

$\Delta > 0 \rightarrow \Delta = 2m^2 - 4m + 1 > 0 \rightarrow x_{2,3} \in \mathbb{R}$

دستگاه ندارد

الف) $P < 0 \rightarrow 2m^2 - 4m + 1 > 0 \rightarrow \frac{1}{2} < m < \frac{3}{2}$

$\Delta > 0 \rightarrow \frac{1}{2} < m < \frac{3}{2}$

ب) $x_5 = -\frac{b}{a} = -1 \Rightarrow \frac{-2m-1}{2m-1} = -1 \rightarrow 2m = 1 \rightarrow m = \frac{1}{2}$

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$\Delta = 0 \rightarrow b^2 - 4ac = (-2 \sin \alpha)^2 - 4 \times \frac{1}{2} \times \frac{1}{2} = 4 \sin^2 \alpha - 2 = 0 \rightarrow 2 \sin^2 \alpha = 1 \rightarrow \sin^2 \alpha = \frac{1}{2} \rightarrow \sin \alpha = \pm \frac{1}{\sqrt{2}}$

$-\frac{b}{a} = \frac{2 \sin \alpha}{1 \times \frac{1}{2}} = 4 \sin \alpha \rightarrow \frac{1}{2} \times 1 = \frac{1}{2}$

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$$\frac{4x^2 - 13x^2 - 11x^2 + 13x + 4}{1 - x^2} = -4x^2 + 13x + 4 \quad x \neq \pm 1$$

$$\text{Max} \rightarrow x_5 = -\frac{b}{2a} = -\frac{13}{2(-4)} = \frac{13}{8} \rightarrow -4\left(\frac{13}{8}\right)^2 + 13\left(\frac{13}{8}\right) + 4 = \frac{49}{2} \quad (5)$$

$$MS = \omega p + V \rightarrow \frac{pm+y}{m} = -\frac{1}{m} + V \rightarrow \frac{pm+y}{m} = V \quad \begin{matrix} \Sigma m = 14 \\ m = 5 \\ S = \frac{p}{r} \\ p = -\frac{1}{r} \end{matrix}$$

$$\alpha^r + \beta^r = S^r - rp \rightarrow \left(\frac{p}{r}\right)^r - r\left(-\frac{1}{r}\right) \Rightarrow \frac{p^r}{r} + 1 = \frac{13}{r}$$

(9)

$$\begin{matrix} S = \omega & B = \frac{r}{\alpha} \\ P = r & \alpha\beta = r \end{matrix} \quad \frac{\Sigma\alpha + \beta^r}{\omega\beta^r} \Rightarrow \frac{\Sigma\alpha + \beta^r}{\omega\beta^r} \frac{1}{\omega} \Rightarrow \frac{\Sigma\alpha}{\frac{r}{\alpha^r}} + \frac{\beta^r}{\omega} \rightarrow \frac{\alpha^r}{\omega} + \frac{\beta^r}{\omega}$$

$$\frac{\alpha^r + \beta^r}{\omega} \rightarrow \frac{S^r - rSP}{\omega} \Rightarrow \frac{13^r - r(10)}{\omega} \rightarrow \frac{13}{\omega} = \frac{11}{\omega} \quad (11) \quad (11/10)$$

$$c = \Sigma \rightarrow x = 0 \quad y = ax^r + bx + c \quad \begin{matrix} |y \\ |y \end{matrix}$$

$$x = r \rightarrow y_1 = \Sigma b = 12 \quad y_1 = \Sigma a + r b + c \rightarrow \Sigma a + r b + c = 12 \rightarrow \Sigma a + r b = 10 \rightarrow r a + b = 10$$

$$x = r \rightarrow y_p = \Sigma \quad y_1 = 9a - r b + c \rightarrow 9a - r b + c = \Sigma \rightarrow 9a - r b = 0 \rightarrow 9a = b$$

$$ra + b = 10 \quad a = 1, b = r \rightarrow y_1 = x^r + r x + c \quad x_5 = -\frac{b}{2a} = -\frac{r}{2} = -1/2 \quad (5)$$

$$y = x \rightarrow x_2 = r x^r + (m+1)x + (m+4) \rightarrow r x^r + m x + (m+4) = 0 \quad (\text{نوعه اولی و خطی})$$

$$\Delta = 0 \rightarrow m^2 - \Sigma(r)(m+4) = m^2 - 11m - 44 = 0 \rightarrow (m-11)(m+4) = 0 \quad m < -4 \quad \begin{matrix} \text{ریشه ها} \\ \text{مستقیم} \end{matrix}$$

$$x_5 = -\frac{b}{2a} = -\frac{m}{2} \rightarrow x_5 > 0 \rightarrow -\frac{m}{2} > 0 \quad m < 0 \rightarrow \boxed{m = -4} \quad (5)$$