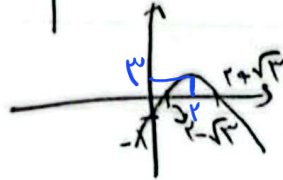
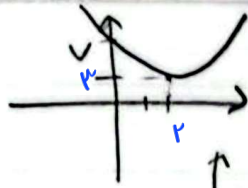


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Date:



1- الف) $\Delta < 0, a = 1, x_5 = \frac{-1 \pm \sqrt{1-4}}{2} = \frac{-1 \pm \sqrt{-3}}{2}$

ب) $\Delta < 0, a < 0, x_5 = \frac{-1 \pm \sqrt{1-4}}{2} = \frac{-1 \pm \sqrt{-3}}{2}$

$x_{1,2} = \frac{-1 \pm \sqrt{1-4}}{2} = \frac{-1 \pm \sqrt{-3}}{2}$

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2- الف) $\Delta > 0 \rightarrow (m+1)^2 - 4(\frac{1}{m-2}) > 0 \rightarrow m^2 - 2m - 1 > 0$

ب) $\Delta < 0$

$(m-2)(m+1) > 0$

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$\Delta = 0 \rightarrow m = -1, m = 2$

ج) $\Delta < 0$

$\Delta < 0 \rightarrow -1 < m < 2$

د) $\Delta > 0$

$\Delta > 0 \rightarrow m \leq -1, m \geq 2$

3- الف) $\frac{c}{a} > 0 \rightarrow \frac{1}{m-2} > 0 \rightarrow m > 2, \frac{-b}{a} < 0 \rightarrow \frac{2(m+1)}{m-2} < 0 \rightarrow m < -1$

m	-1	2
m+1	-	+
m-2	-	+
	+	-

استنتاج $-1 < m < 2$ نتیجہ ہے

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

ب) $\Delta < 0$

$P < 0 \rightarrow \frac{c}{a} < 0 \rightarrow \frac{1}{m-2} < 0 \rightarrow m < 2$

m	-1	2
m+1	-	+
m-2	-	+
	+	-

$-1 < m < 2$

$y = (m-2)x^2 - 2(m+1)x + 1$

د) $\Delta > 0$

$\Delta > 0 \rightarrow 2(m+1)^2 - 4(m-2) > 0 \rightarrow m^2 - 4m + 1 > 0$

$m < 2$

$\frac{c}{a} < 0 \rightarrow \frac{1}{m-2} < 0 \rightarrow m < 2$

$x_5 = -2 \rightarrow \frac{2(m+1)}{2(m-2)} = -2 \rightarrow -2m + 4 = m+1$

$m = 1$

