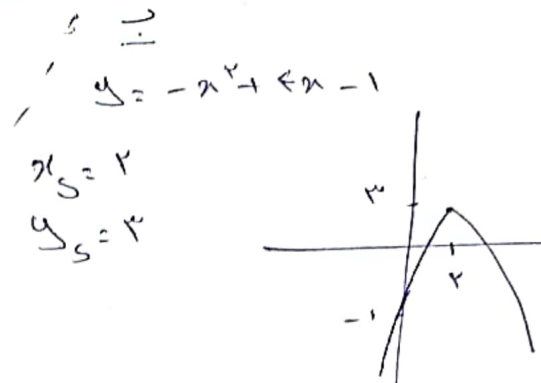
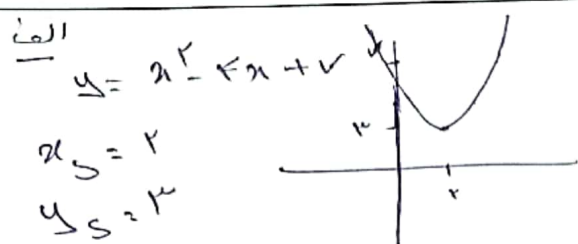




الف) $\Delta > 0 \rightarrow m^2 + 1 - 4m - 4m - 14 > 0 \rightarrow (m-1)^2 > 14$

ب) $\Delta = 0 \rightarrow (m-1)^2 = 14 \rightarrow m-1 = \pm \sqrt{14} \rightarrow m = 1 \pm \sqrt{14}$

ج) $\Delta < 0 \rightarrow (m-1)^2 < 14 \rightarrow m-1 < \sqrt{14} \rightarrow m < 1 + \sqrt{14}$

د) $\Delta \geq 0 \rightarrow (m-1)^2 \geq 14 \rightarrow m-1 \geq \sqrt{14} \rightarrow m \geq 1 + \sqrt{14}$

الف) ① $\Delta > 0$ ✓
② $\frac{c}{a} > 0$
③ $\frac{-b}{a} < 0$
④ $\frac{1}{m-1} > 0 \rightarrow m > 1$
⑤ $1 - (m-1) + 4 > 0 \rightarrow m > -4$
⑥ $1 - \frac{1}{m-1} > 0 \rightarrow m > 2$
⑦ $1 - 4m + 4 < 0 \rightarrow m < 1$

ب) ① $\Delta > 0$
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ب) $x_1 = -1 = -\frac{b}{2a}$
 $\frac{(1/m+1)}{1/m-1} = -1$
 $1/m+1 = -1/m+1$
 $2/m = 0 \rightarrow m = \infty$

$\Delta = 0 \rightarrow 1 - 4 \sin^2 \alpha - 4 \left(\frac{1}{\sin \alpha}\right) \left(\frac{1}{\sin \alpha}\right) = 0$
 $1 - 4 \sin^2 \alpha - 4 \csc^2 \alpha = 0$
 $1 - 4 \sin^2 \alpha - 4 \frac{1}{\sin^2 \alpha} = 0$
 $\sin^2 \alpha = 1 \rightarrow \sin \alpha = \pm 1$
 $\alpha = \frac{\pi}{2} \text{ or } \frac{3\pi}{2}$

$$y = \frac{(r_2^r - r_{n-1})(r_2^r - r_{n-1} - \delta)}{1 - r^r} = 0$$

$$\frac{(r(\frac{\delta}{r})^r - r(\frac{\delta}{r}) - 1)(r(\frac{\delta}{r})^r - r(\frac{\delta}{r}) - \delta)}{1 - (\frac{\delta}{r})^r} = 0$$

$-r_2^r + 1r_2^r + \delta - m \times$
 $\frac{r_2^r}{r_2^r}$
 $\frac{r_2^r}{r_2^r}$

— $r(\alpha + \beta) = \omega(\alpha \times \beta) + v$

$\beta^r + \alpha^r \rightarrow (\alpha + \beta)^r - r(\alpha \times \beta)(\alpha + \beta) = ?$ (1) $r(-\frac{r}{r})$

$r(\frac{m+r}{m}) = \omega(-\frac{r}{m}) + v$

$\frac{r m + 4 - 1}{m} = v \rightarrow r m + 4 = v m$

$\frac{r}{r} + \frac{4}{r} = \frac{1r}{r}$

$m = r \rightarrow \alpha \times \beta = -\frac{1}{r}$
 $\rightarrow \alpha + \beta = \frac{r}{r}$

$\alpha \times \beta = r$
 $\alpha + \beta = \omega$

$\frac{\frac{1}{\alpha \beta^r} + \frac{\beta^r}{\alpha}}{\frac{\beta^r}{\alpha \beta^r} + \beta} + \frac{\beta^r}{\alpha}$

$\frac{1}{\alpha \beta^r} + \frac{\beta^r}{\alpha}$

$\alpha \beta = r \rightarrow \beta = \frac{r}{\alpha}$

$\frac{\alpha^r + \beta^r}{\alpha} = \frac{5 - r_{sp}}{\alpha} = 19$

$r(r) + 1 = r a + r b + r$
 $r(r a + b) = 1 \rightarrow r a + b = \omega$

$-4 + \frac{r}{r} = 4a - r b + r \rightarrow r a + b = 0$

$y = 2^r + r x + r$

$x = -\frac{r}{r}$

$\begin{cases} r a - b = 0 \\ r a + b = \omega \\ \hline \omega a = \omega \\ b = r \quad a = 1 \end{cases}$

ازای هر x, y برابر
 $\Rightarrow y = +x$

$x = 1$ (ای) $\rightarrow 1 = r + m + 1 + m + 4$

$\Delta = 0 \rightarrow m = +1, -r$

$\rightarrow r m + 4 = 0$

$m = -r$