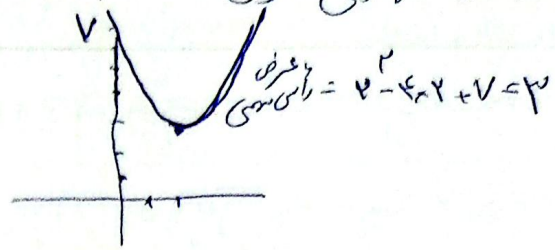


الف) $y = m^2 - 4m + 7$, $\Delta < 0$
 طول رأس می = $2 = \frac{4}{2 \times 1}$



ب) $-m^2 + 4m - 1$, $\Delta > 0$

رأس می = $\left[\frac{2}{1} \right]$



رأس می = $\frac{-2 \pm \sqrt{16 - 4}}{-2} = 2 \pm \sqrt{3}$
 $2 + 1, \sqrt{3} \approx 2.7$
 $2 - 1, \sqrt{3} \approx 0.3$

الف) $\Delta > 0 \Rightarrow (m+1)^2 - 4 \times 2 \times \left(\frac{1}{4}m + 2\right) > 0 \quad m \in (-\infty, -2) \cup (\omega, +\infty)$

ب) $\Delta = 0 \Rightarrow (m+1)^2 - 4 \times 2 \times \left(\frac{1}{4}m + 2\right) = 0 \Rightarrow m = -2, \omega$

ج) $\Delta < 0 \Rightarrow$ طول رأس می $\Rightarrow m \in (-2, \omega)$

د) $\Delta \geq 0 \Rightarrow$ از دو تا معادله $m \in (-\infty, -2] \cup [\omega, +\infty)$

الف) $\Delta > 0 \Rightarrow 4(m+1)^2 - 4 \times 10(m-2) > 0$ همیشه برقرار است

$S < 0 \quad P > 0 \quad S = \frac{2(m+1)}{m-2} < 0 \quad P = \frac{10}{m-2} > 0 \Rightarrow m > 2$
 م از این معادله

ب) $\Delta > 0 \Rightarrow$ همیشه برقرار است $S < 0, P < 0 \Rightarrow S = \frac{2(m+1)}{m-2} < 0 \quad P = \frac{10}{m-2} < 0$
 منفی منفی مثبت
 جواب: $m \in (-1, 2) \equiv (-1, 2) \quad A \quad m < 2$

الف) $\Delta > 0 \quad P < 0 \quad 4(m+1)^2 - 4 \times 10(m-2) > 0$ همیشه برقرار است

$P < 0 \quad \frac{10}{m-2} < 0 \quad m < 2 \quad m \in (-\infty, 2)$

ب) $\frac{-b}{2a} = -2 = \frac{2(m+1)}{2(m-2)} \Rightarrow -2m + 4 = m + 1 \quad 3m = 3 \quad m = 1$

$\Delta \geq 0 \quad 4 \sin^2 - 4 \times \frac{1}{4} \times \frac{1}{4} \geq 0 \quad \sin^2 - 1 \geq 0 \quad \sin^2 \geq 1 \quad \sin \geq 1 \text{ و } \sin \leq -1$
 غلط

$\frac{1}{4}m^2 - 2m + \frac{1}{4} = 0 \quad m = 1, \omega$

$\frac{1}{4}m^2 + 2m + \frac{1}{4} = 0 \quad m = -1, \omega$
 $\sin = -1 \times$

$$\frac{(r m + 1)(m - 1)(r m - \omega)(m + 1)}{-(m - 1)(m + 1)} = -(r m + 1)(r m - \omega) = 9m^2 + 15m + \omega$$

$-\frac{1}{r}, p$

$$\bullet \frac{r a c - b^2}{r a} = \frac{-r \times 9 \times \omega - 15^2}{-r \times 9} = \frac{r 19}{r 9}$$

$$S = \frac{m+r}{m} \quad p = \frac{r}{m} \quad r S = \omega p + v \quad S^r - r p = ?$$

$$\frac{r m + 9 + 10}{m} = v \Rightarrow m = r \Rightarrow S = \frac{r}{r} \quad p = \frac{r}{r} = \frac{1}{r}$$

$$S^r - r p = \frac{9}{r} + r \times \frac{r}{r} = \frac{19}{r} \checkmark$$

$$S = a + B = \omega \quad p = a B = r \quad B = \frac{r}{a} \quad \frac{r a + B^2}{\omega \times \frac{r}{a}} =$$

$$\frac{r a^2 + a^2 B^2}{r a} \Rightarrow \frac{r a^2 + (a^2 \times \frac{r^2}{a^2})}{r a} = \frac{r(a^2 + B^2)}{\cancel{r} a} = \frac{S^r - r S p}{\omega} = \frac{9\omega}{\omega} = 19$$

$$C = r \quad a m^r + b m + r = r m + 10 \Rightarrow a m^r + m(b - r) = 9$$

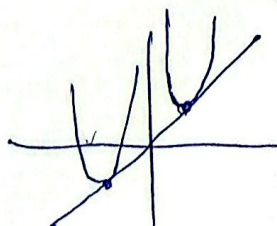
$$\left. \begin{array}{l} m = r \Rightarrow r a + r b = 10 \\ m = -r \Rightarrow 9a - r b = 0 \end{array} \right\} \begin{array}{l} C = r \\ a = 1 \\ b = r \end{array} \Rightarrow m^r + r m + r = 9 \quad \frac{r}{r+1} = -1.6$$

$$r m^r + (m+1)m + m + 9 = n \Rightarrow \frac{m^2}{2} \Rightarrow \delta = 0$$

$$\Rightarrow r m^r + (m)m + m + 9 \Rightarrow \delta = 0 \Rightarrow m^r - r \times r \times (m+9) = 0$$

$$\Rightarrow m = 12, -4$$

اولی ۱۲ است
دوم -۴ است



محل تقاطع