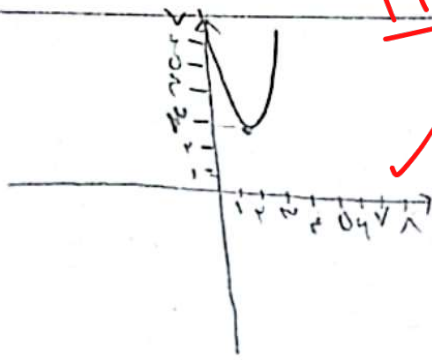
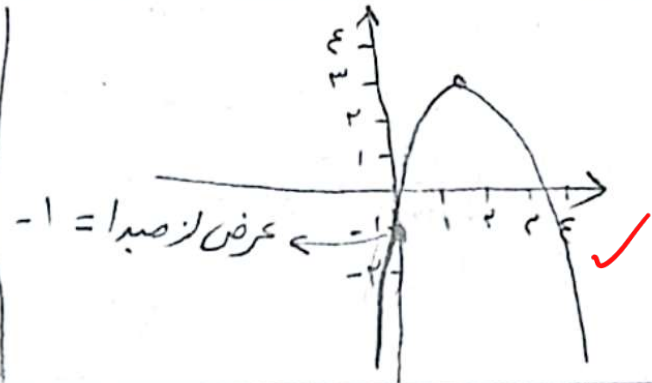


۱۹, ۵



الف



عرض از صفا = -1

(۲)

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(الف) $(m+1)^2 - 4m - 14 > 0$ $m^2 - 2m - 15 > 0$ $(m-5)(m+3) > 0$ $m < -3$ $m > 5$ ✓

(۲)

(ب) $(m+1)^2 - 4m - 14 = 0$ $(m-5)(m+3) = 0$ $m = 5, -3$ ✓

۲

(ج) $(m+1)^2 - 4m - 14 < 0$ $(m-5)(m+3) < 0$ $-3 < m < 5$ ✓

(د) $(m+1)^2 - 4m - 14 \geq 0$ $m^2 - 2m - 15 \geq 0$ $(m-5)(m+3) \geq 0$ $m \leq -3$ $m \geq 5$ ✓

(الف) $\Delta > 0$
 $P > 0$
 $S < 0$
 $\rightarrow 4(m+1)^2 - 4m + 14 > 0$
 $\rightarrow \frac{10}{m-1} > 0 \Rightarrow m > 1$
 $\rightarrow \frac{m+1}{m-1} < 0 \Rightarrow -1 < m < 1$
 جواب ندارد ✓

$\Delta > 0$
 $P < 0$
 $S < 0$
 $\rightarrow 4(m+1)^2 - 4m + 14 < 0$
 $\rightarrow \frac{10}{m-1} < 0 \Rightarrow m < 1$
 $\rightarrow \frac{m+1}{m-1} < 0 \Rightarrow -1 < m < 1$ ✓

(۲)

۳

$\frac{10}{m-1} < 0$ $\Delta > 0$ $P < 0$
 $\rightarrow m < 1 = I$
 $\rightarrow 4(m+1)^2 - 4m + 14 < 0$
 $m \in \mathbb{R} = II$
 $I \cap II = m < 1$ ✓

$\frac{m+1}{m-1} = -1$
 $m+1 = -2m+1$
 $3m = 0$
 $m = 0$ ✓

(۲)

۴

$4 \sin^2 \alpha - 4 \left(\frac{1}{2} \times \frac{3}{4} \right) \geq 0$ $\sin \alpha = 1$
 $\sin \alpha = -1$ ✓
 تحقق نمی پذیرد ✓

(۲)

۵

$\frac{1}{2} x^2 - 2x + \frac{3}{2} = 0$ $\frac{1 \pm \sqrt{4-4}}{1} = 1, 1$ ✓

$$\frac{(-2x+1)(x^3x-1)(x+1)(x-0)}{(x+1)(x+1)} = -4x^2 + 12x + 0 = y$$

$$\frac{-b}{2a} = \frac{12}{-4} = -3 \quad -4\left(\frac{12}{-4}\right) + 12\left(\frac{12}{-4}\right) + 0 = \frac{48}{-4} = -12$$

$$rS = \Delta p + V$$

$$r\left(\frac{m+r}{m}\right) = \frac{1}{m} + V$$

$$rmy = Vm - 1 \quad \boxed{m = 4}$$

$$2m^2 - \varepsilon n - r$$

$$S - rp = \varepsilon + \varepsilon = \frac{12}{r}$$

$$\beta^r = \omega \beta - r$$

$$\beta^r = \omega \beta^r - r\beta = r\omega \beta - r\beta - 1 = r(\omega \beta - 1) - 1$$

$$\beta^{\omega} = \beta^r \beta^{\omega} = (\omega \beta - r)(r\omega \beta - 1) = \omega^2 \beta^2 - r\omega \beta + r\omega \beta - r = \omega^2 \beta^2 - r = 19\beta - 21$$

$$\frac{r\omega \beta - 21 + \varepsilon(\beta - \omega)}{\omega \beta - r} = \frac{9\omega \beta - 38}{\omega \beta - r} = 19 \checkmark$$

$$\begin{cases} \varepsilon a + rb + \varepsilon = r(1+1) + \varepsilon \\ 4a - rb + \varepsilon = r(-r) + 1 = \varepsilon \end{cases} \quad \begin{matrix} a=1 \\ b=r \end{matrix}$$

$$\frac{-b}{2a} = -1/0 \quad x = -1, 0 \checkmark$$

$$r^2(m+1)x + m+4 = n$$

$$r^2x^2 + mx + m+4 = 0$$

$$m^2 - 11m - 81 = 0$$

تحقق چون بر مبنای نامیه
سوم حاصل می شود
 $(x-12)(x+8) = 0 \quad x = 12, -8$