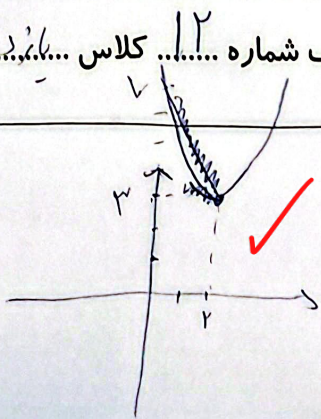
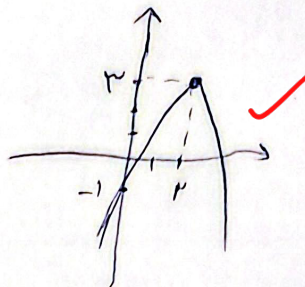


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$$\Delta = 0 \rightarrow m = -2 \leq m = 5 \quad \checkmark$$

(ب)

$$\Delta > 0 \rightarrow m^2 + 2m + 1 - 2m + 1 > 0 \rightarrow m^2 - 2m + 2 > 0 \rightarrow m < -2 \vee m > 5 \quad \checkmark$$

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$$\Delta \geq 0 \rightarrow m \leq -2 \vee m \geq 5 \quad \checkmark$$

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$$\Delta < 0 \rightarrow -2 < m < 5 \quad \checkmark$$

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$$\Delta > 0 \rightarrow 4m^2 + 16m + 4 - 6m + 10 > 0 \rightarrow 4m^2 + 10m + 14 > 0 \rightarrow m < -2 \vee m > 5 \quad \checkmark$$

$$\Delta < 0 \rightarrow \frac{m+1}{m-2} < 0 \rightarrow -1 < m < 2 \quad \checkmark$$

$$\Delta > 0 \rightarrow -1 < m < 2 \quad \checkmark$$

$$\Delta < 0 \rightarrow m < -2 \vee m > 5$$

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

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$$\Delta < 0 \rightarrow m < -2 \quad \checkmark$$

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$$\frac{-b}{2a} = -2 \rightarrow \frac{4m+4}{4m-4} = -2 \rightarrow m = 1 \quad \checkmark$$

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$$4x^2 - 12(\sin \alpha)x + 9 = 0$$

$$\sin \alpha = 1 \rightarrow \Delta = 0$$

$$\Delta = \frac{12 \sin \alpha \pm \sqrt{144 \sin^2 \alpha - 144}}{8} = \frac{12}{4} = 3 \quad \checkmark$$

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$$\frac{r(x-1)(x+\frac{1}{r})(x+1)(x-\frac{1}{r})}{-(x+1)(x-1)} = -r(x+\frac{1}{r})(x-\frac{1}{r}) = -rx + \frac{1}{r}x + \frac{1}{r} - \frac{1}{r}x + \frac{1}{r} = -rx + \frac{2}{r}$$

$$- (x+1)(x-1)$$

$$s_x = \frac{1}{r}$$

$$\rightarrow \text{max. } \delta =$$

$$= \frac{1}{r} \times 199 = \frac{199}{r} + \frac{1}{r} = \frac{200}{r}$$

(2)

$$rs = dp + va$$

$$s - rp = \frac{r}{r} + 1 = \frac{1}{r}$$

$$\frac{m+r}{n} = \frac{10m}{m} + v \rightarrow m \neq 0 \rightarrow \frac{m+r}{n} = \frac{vm-10}{rm} \rightarrow vm-10m = rm+r+vm$$

$$m=r \rightarrow p = \frac{-r}{+f} = -\frac{1}{r} \rightarrow s = \frac{r}{f} = \frac{r}{r}$$

$$f_m r - 14m = 0$$

$$f \rightarrow \Delta \geq 0 \checkmark$$

(2)

$$x^r - \delta x + r \leq 0 \rightarrow p=r, s=\delta$$

$$\frac{f\alpha + \beta^0}{\Delta B^r} = \frac{9\delta(\delta B - r)}{\delta(\delta B - r)} = \frac{9\delta}{\delta} = 9$$

$$\beta^r = \delta B - r \rightarrow \beta \in B(\delta B - r)$$

$$\beta r = 1 \dots \Rightarrow \beta \geq r \vee \delta B - r \geq 0$$

$$f\alpha + \beta^0 = 9\delta(\delta B - r)$$

$$9\alpha = \delta - \beta$$

(2)

$$an^r + bn + r = rn + 10 \rightarrow an^r + (b-r)n - 9 = 0$$

$$\frac{r}{r}n + \frac{b-r}{r}n + \frac{10}{r} = 0$$

$$\rightarrow -\frac{2}{r} = -\frac{r}{r}$$

$$f\alpha - 9 = 0 \rightarrow \alpha = \frac{9}{r}$$

$$b = r, \delta = \frac{9}{r}$$

(2)

$$f(n) = rn^r + (m+1)n + 9 = 0 \rightarrow rn^r + mn + m + 9 = 0$$

$$mn = f\alpha + m + 1 = 1 \rightarrow f\alpha + m + 1 = 1$$

$$\Delta = 0 \rightarrow n^r - \frac{1}{r}m - 4 = 0$$

$$\Delta = 0 \rightarrow n^r - \frac{1}{r}m - 4 = 0$$

(2)

مکانی که در آنجا می شود