

نام خانوادگی: غزل عباسی ۱۳۰۰ طیف ۱۳۰۰ (۱۹) ماس: یازدهم سرده A (مربع)

۱ محور ها را در کدام نقطه
 $x=2 \Rightarrow n_3=2 \quad \frac{-b}{2a} = 2 = \frac{-1}{2n-2} = 2 \Rightarrow n = \frac{1}{4}$
 $y = \frac{-1}{4}x^2 + x + 2 \xrightarrow{x=2} -1 + 2 + 2 = 3 \quad y=0$
 $-x^2 + 4x + 12 = 0 \Rightarrow x^2 - 4x - 12 = 0 \quad (x-6)(x+2) = 0 \quad x = -2 \text{ یا } 6$
 پاسخ نهایی: ۶ ✓ [۹]

۲ صورت m: بین دورترین علامت + و - $m < 0$ $\Delta > 0 \Rightarrow 20 - 4m^2 > 0$
 $f(n) = mn^2 - 8n + m$

n	1	2
f(n)	-6	-4

 $\Delta = \frac{-8}{2m} = \frac{-4}{m}$
 $\Delta > 0 \Rightarrow \frac{-4}{m} > 0 \Rightarrow m < 0$
 $\textcircled{1} \cap \textcircled{2} \Rightarrow m \in (-\frac{4}{9}, 0)$

۳ $\frac{1-\sqrt{5}}{2}, \frac{1+\sqrt{5}}{2} \quad S = \frac{1-\sqrt{5} + 1+\sqrt{5}}{2} = 1 \quad \rho = \frac{(1-\sqrt{5})}{2} \times \frac{(1+\sqrt{5})}{2} = -1$
 $\frac{9-8}{18} = \frac{1}{9}$
 ضریب صفح: $x^2 - 2x + \frac{1}{9}$

۴ $\alpha + \beta = 4 \quad \alpha \cdot \beta = \frac{m+4}{4} \quad 4\alpha^2 + \beta^2 = 12 \Rightarrow 4\alpha^2 + (4-\alpha)^2 = 12 \Rightarrow 4\alpha^2 + 16 - 8\alpha + \alpha^2 = 12$
 $5\alpha^2 - 8\alpha + 4 = 0 \Rightarrow \alpha = 1 \Rightarrow \beta = 3$
 $\rho = \frac{m+4}{4} = \alpha \cdot \beta = 4 \Rightarrow m+4=16 \Rightarrow m=12$

۵ $y = a(x-2)^2 + y_0 \Rightarrow y = a(0-2)^2 + 9 \Rightarrow -4 = 4a \Rightarrow a = -1$
 $S(r, a) \quad A(0, a) \quad y = -1(x-2)^2 + a \Rightarrow y = -x^2 + 4x - 4 + a$
 $-x^2 + 4x - 4 + a = 0 \Rightarrow x^2 - 4x + 4 - a = 0 \Rightarrow (x-2)^2 = a$
 $(x-2)^2 = a \Rightarrow x = 2 \pm \sqrt{a}$

۶ $\alpha + \beta = \frac{V}{a} \rightarrow$
 $\alpha \cdot \beta = \frac{a\beta}{a} \Rightarrow \frac{9}{a} = \alpha \Rightarrow a = \pm 9 \quad \alpha = -9 \Rightarrow a = -9$
 $-9 + \beta = \frac{V}{-9} \Rightarrow \beta = \frac{V}{-9} + 9 = \frac{V}{9}$
 $\frac{1}{a} + \frac{1}{\beta} = \frac{1}{-9} + \frac{1}{\frac{V}{9}} = \frac{-1 + V}{9} = \frac{V-1}{9}$
 $\frac{1}{\alpha} + \frac{1}{\beta} = \frac{\alpha + \beta}{\alpha \cdot \beta} = \frac{\frac{V}{a}}{\frac{a\beta}{a}} = \frac{V}{a\beta} = \frac{V}{9 \times \frac{V}{9}} = \frac{V}{9}$

۷ $x^2 + mx - 2m = 0 \quad \alpha^2 - m\beta = 1 \Rightarrow \alpha^2 + 3\beta = 1$
 $S = ? = -m \quad \rho = -2m \quad 3\beta + 4\beta + \beta^2 = \rho + \beta^2 \Rightarrow 4\beta + \beta^2 = -2m + \beta^2$
 $4\beta = -2m \Rightarrow m = -2\beta$
 $\alpha^2 + 3\beta = 1 \Rightarrow \alpha^2 = 1 - 3\beta$
 $1 - 3\beta = 1 \Rightarrow \beta = 0$
 $S = -2\beta = 0$

$$y_s = 1 = \frac{-\Delta}{F_a} = \frac{-(b^2 - Fac)}{F_a} = \frac{-(19 - F(\frac{m^2}{r} + vm))}{F_m} = 1 \quad m < 0$$

$$\frac{-19 + rm^2 + r\lambda m}{F_m} = 1 \Rightarrow +rm^2 + r\lambda m - 19 = F_m \xrightarrow{\div r} m^2 - rm - \lambda = 0$$

$$m = \begin{matrix} \xrightarrow{F_m} m = F & \text{و و و و} \\ \searrow m = -r & \text{و و و و} \end{matrix} \quad f(m) = -rm^2 + fm + 9 \Rightarrow x = -1, r \quad \boxed{K = 1}$$

$$y = a(n - n_0)^r + y_0 \quad A(0, K) \quad B(r, 4)$$

$$y = a(n - r)^r + 4 \Rightarrow K = a(-r)^r + 4 \Rightarrow a = \frac{-1}{r} \quad \text{منها یک (ریشه ها)}$$

$$y = \frac{-1}{r}(n - r)^r + 4 \Rightarrow y = \frac{-1}{r}n^r + r + rn + 4 = \frac{-1}{r}n^r + rn + K = 0$$

$$\times r \rightarrow -n^r + rn + \lambda = 0 \xrightarrow{\times -1} n^r - rn - \lambda = 0$$

$$n_1, n_2 = \frac{r \pm \sqrt{19 + 4r}}{2} \Rightarrow n_1 = \frac{r + r\sqrt{r}}{2} = r + r\sqrt{r}, n_2 = r - r\sqrt{r}$$

$$\frac{1}{r + r\sqrt{r}} + \frac{1}{r - r\sqrt{r}} = \frac{r - r\sqrt{r} + r + r\sqrt{r}}{r - r^2} = \frac{K}{-\lambda} = \boxed{\frac{1}{r}}$$

$$\text{بجای: } \frac{1}{n_1} + \frac{1}{n_2} = \frac{n_1 + n_2}{n_1 \cdot n_2} = \frac{K}{-\lambda} = \frac{-1}{r}$$

$$n = r \quad K - \lambda a - \lambda + (ra^r + 4a + r) = (ra^r - \lambda a - 1) = 0$$

$$a^r - ra - r = 0 \quad (a - r)(a + 1) = 0$$

مواب 4 و 9 و 16

$$a_1 = 1, \frac{-1}{r}$$

$$a = 1 \Rightarrow n^r - \lambda n + 1r = 0 \Rightarrow (n - 4)(n - r) = 0 \Rightarrow n_2 = 4$$

$$a = \frac{-1}{r} \Rightarrow n^r - \frac{\lambda}{r}n + \frac{K}{r} = 0 \xrightarrow{\times r} rn^r - \lambda n + K = 0$$

$$n^r - \lambda n + 1r = 0 \quad (n - 4)(n - r) = 0 \quad n = r, 4 \rightarrow n = \frac{r}{r} = 1$$