

نام و نام خانوادگی: پاسبانمه تشریحی تکلیف شماره ۱۲... کلاس:
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$$\frac{-a}{r^2} = \frac{-b^2 + r^2}{-r^2} = \frac{-b^2 - 1}{-r^2} = 1 \Rightarrow b^2 + 1 = r^2 \Rightarrow b^2 = r^2 - 1$$

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$$\frac{-b}{r^2} \Rightarrow -\left(\frac{-b}{r^2}\right)^2 + b\left(\frac{-b}{r^2}\right) + r^2 = 1$$

$$\frac{-b^2}{r^4} + \left(\frac{-b^2}{r^2}\right) + r^2 = 1 \Rightarrow \frac{-b^2}{r^4} + \frac{-b^2}{r^2} + r^2 = 1$$

$$\frac{b^2}{r^2} = 1 \Rightarrow b^2 = r^2$$

الف) $f(x) = x^2 + r^2 + r^2 = x^2 + 2r^2$
 $x^2 = +$
 پاسخ ندارد ✓
 منفی نمیباشد و $x=0$ هم نمیشود

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ب) $f(x) = (x-r)^2 - (x-r)^2 - 1 = 2x^2 - 2rx + r^2 - 1$

$$x^2 - rx + \frac{r^2}{4} - \frac{r^2}{4} - 1 = 0 \Rightarrow x^2 - rx + \frac{r^2}{4} - 1 = 0$$

$$x = \frac{r \pm \sqrt{r^2 - 4\left(\frac{r^2}{4} - 1\right)}}{2} = \frac{r \pm \sqrt{r^2 - r^2 + 4}}{2} = \frac{r \pm 2}{2}$$

$\alpha = \beta + r \Rightarrow 3 = \alpha + \beta + r = 1 \Rightarrow \beta = 1, \alpha = 3$
 $\alpha = 3, \beta = 1 \Rightarrow m = 12$
 $m = 12 \Rightarrow$ ✓

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$\beta \geq r\alpha - 1 \Rightarrow \alpha + r\alpha - 1 \geq 3 \Rightarrow \alpha \geq 2, \beta = 0 \Rightarrow m = 1$
 $m = 1 \Rightarrow$ ✓

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$\alpha = \beta + r \Rightarrow P \cdot \beta \times \frac{1}{\beta} = \frac{m^2 - r}{-m} = 1$
 if $m = r \Rightarrow r^2 + r^2 = 0$
 if $m = 1 \Rightarrow -r^2 + r^2 - 1 = 0 \Rightarrow 0 > 0$
 $m = 1$ ✓

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معادله
 $\alpha \beta = \gamma = \rho$
 $\alpha^2 \beta^2 = \gamma^2 \Rightarrow \rho \beta = \gamma \Rightarrow \gamma \times \rho = \gamma \Rightarrow \beta = \frac{\gamma}{\rho}$ و $\alpha = \frac{\gamma}{\rho}$
 $\alpha + \beta = m = \frac{1}{\rho} + \frac{\gamma}{\rho} = \frac{\gamma + 1}{\rho} = \frac{\gamma \rho}{\rho^2} \checkmark$
 $\checkmark \Delta > 0$

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$\alpha = \gamma \beta \Rightarrow \rho = \gamma \beta^2, \gamma = \gamma \beta = \gamma \Rightarrow \beta = 1$ و $\alpha = \gamma \Rightarrow m = \gamma \checkmark \Delta > 0$

$b^2 - 4ac = 14 - 12 = 2 > 0$

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$\alpha^2 + \frac{1}{\alpha^2} = \frac{\alpha^2 + 1}{\alpha^2} = \frac{(\alpha^2 + 1)(\alpha^2 - \alpha^2 + 1)}{\alpha^2} = \frac{\alpha^2 \chi(\alpha^2 - \alpha^2 + 1 - \alpha^2 + 1)}{(\alpha^2 - 1)(\alpha^2)^2}$

$\alpha^2 - \gamma \alpha + \gamma = 0$
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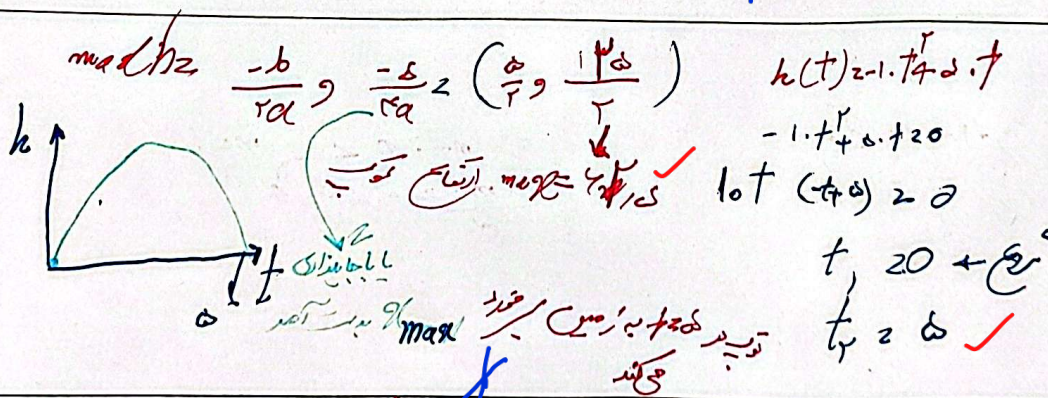
$\alpha \beta = \gamma \rightarrow \beta = \frac{\gamma}{\alpha} \rightarrow \beta^2 = \frac{\gamma^2}{\alpha^2}$

$\alpha^2 + \gamma = \gamma \alpha$

حواسته سوال: $\alpha^2 + \beta^2 = \gamma^2 - \gamma \rho = \gamma^2 - \gamma(\gamma)(\gamma) = \gamma^2 - \gamma^3 = \gamma^2(1 - \gamma) = 3 \cdot 1$

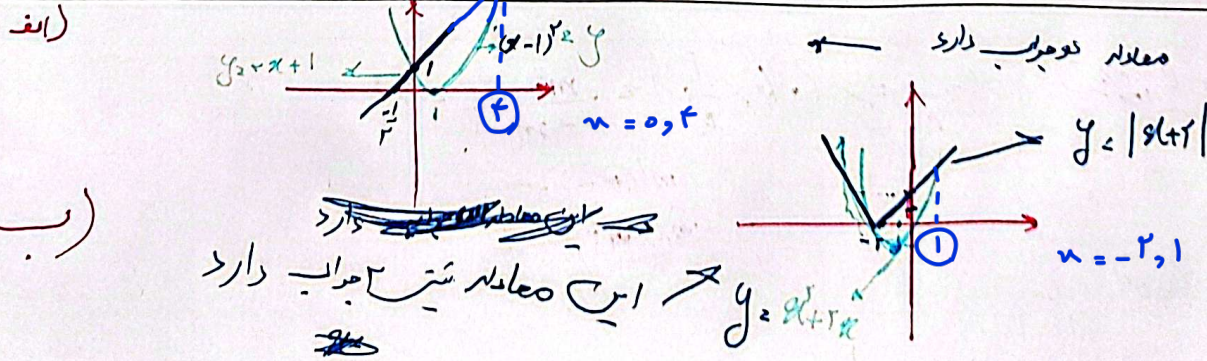
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(1, 5)

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