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$$\frac{1}{r} \cdot a(n+1)^r + 9 = y \Rightarrow \frac{1}{r} a^r - a - \frac{1}{r} + 9$$

$$a(\varepsilon)^r + 9 = 1 \rightarrow a = \frac{-1}{\varepsilon} = -\frac{1}{\varepsilon}$$

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$$\Delta > 0 \rightarrow m^2 - \varepsilon(m+6) = m^2 - \varepsilon m - 6\varepsilon > 0 \rightarrow (m-1)(m+6) > 0$$

$$S = \frac{-b}{a} > 0 \rightarrow \frac{-\varepsilon}{1} > 0 \rightarrow \varepsilon < 0$$

$$P = \frac{c}{a} > 0 \rightarrow \frac{-6\varepsilon}{1} > 0 \rightarrow \varepsilon < 0$$

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$$\Delta > 0 \rightarrow (-3)^2 - \varepsilon(3)(3) < 0 \rightarrow 9 - 9\varepsilon < 0 \rightarrow \varepsilon > 1$$

$$S = \frac{1}{p} \rightarrow Sp = t = \frac{-b}{a} \times \frac{c}{a} = 1 \Rightarrow -bc = a^2$$

$$(m+1)(m-v) = (m-1)(m-u) \Rightarrow m^2 - 5m - v = 0$$

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$$\varepsilon a_1^2 + a_1 + \frac{1}{a_1} + \frac{1}{a_1} = \frac{\varepsilon a_1^2 + 2a_1 + 1}{a_1} = \frac{\varepsilon a_1^2 + 2a_1 + 1}{a_1}$$

$$(a_1^r + \frac{1}{a_1}) (a_1^r + \frac{1}{a_1}) = \frac{9}{\varepsilon}$$

$$= (a_1 a_1)^r + a_1^r + a_1^{-r} + \frac{1}{a_1 a_1} = (-1)^r + \frac{9}{\varepsilon} = \frac{-11}{\varepsilon}$$

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$$(a + \frac{1}{a} + 1)(a - 1) \rightarrow a^2 = a + 1 - \frac{1}{a} + \frac{1}{a} > 1 = a^2 - \frac{1}{a} = a\sqrt{a} - \frac{1}{\sqrt{a}} = \sqrt{a}$$

$$a\sqrt{a} - \frac{1}{\sqrt{a}} - \sqrt{a} = 0 \rightarrow a^2 - 1 - 2a = 0 \rightarrow a = \frac{1 \pm \sqrt{5}}{2} = 1 \pm \sqrt{5}$$

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$$\alpha = r\beta \rightarrow$$

~~Handwritten scribbles and notes~~

1, 5, 7

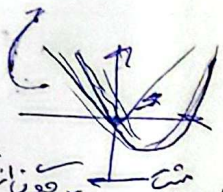
$$\frac{c}{a} = \frac{c}{r} = r\beta\beta = r\beta^2 = \frac{c}{r}$$

$$\alpha = r\beta \Rightarrow \beta = \frac{\alpha}{r} \Rightarrow a = r\beta = \alpha \Rightarrow \beta = \frac{\alpha}{r}$$

$$\Delta - (-1) = 14$$

6

$\alpha > 0$



فشار استرین
میراث از نیروی عبوری
می باشد

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$$\Rightarrow S \geq 0 \rightarrow \frac{-\frac{c}{a}}{2} \geq 0$$

7

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

$$\frac{-b}{a}$$

$$-a^2 - 4ab = 1 \rightarrow a^2 + 4a - b = -1$$

$$a^2 + 4a + 1 - b = a^2 + 4a - r$$

$$a^2 + 4a - r = 1$$

$$b = 4$$

$$ab = 4a = 1$$

8

$$\tan^2 a + b = 0 \rightarrow \alpha + i\beta, \beta + i\alpha \rightarrow \alpha + \beta = \frac{1}{r} = \frac{a}{r}$$

$$\tan^2 a + a - 4 = 0 \rightarrow \alpha, \beta \rightarrow \alpha + \beta = \frac{4a}{r} = -\frac{1}{r}$$

$$\left\{ \frac{ab}{4} \right\} = \left\{ \frac{-4}{4} \right\} = -1$$

$$b = -4$$

9

$$S_1 = \alpha_1 + \beta_1 = -4$$

$$S_2 = \alpha_2 + \beta_2 = -1$$

$$\alpha_1 = \alpha_2$$

$$S_1 - S_2 = \alpha_1 + \beta_1 - \alpha_2 - \beta_2$$

$$|\beta_1 - \beta_2| = 1 - 4 = -3$$

$$3$$

10