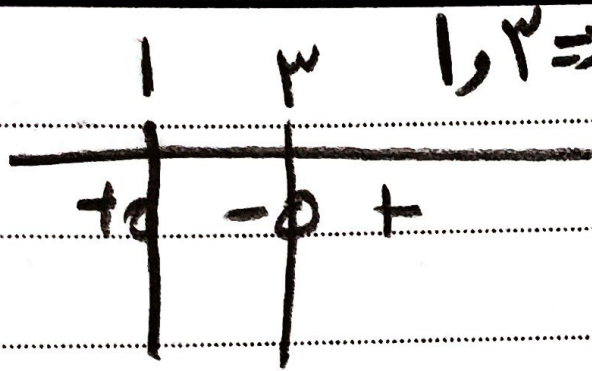


Subject: ()

سلام تویلیا

Date:



ریشه مشترک ۳ و ۳
 $(x-1)(x-2) = a^2 + b^2$

$b = 3 \quad a = 4$

$a + b = 7$

$P = 3$

$S = 4$

-۵

$(k-2)x^2$ و f و a و b که مشخص

$(x-3n)^2 = (x+1)^2$

$-3n = 1 \rightarrow n = -\frac{1}{3}$

$k \in \mathbb{N}$ چون $k-2 < 0 \rightarrow k < 2 \Rightarrow k=1$

معادله معینی است و جواب دارد

$(k-2)x + m - 1 = 0$

$m - 1 = 0 \quad m = 1$

$\frac{a}{-1} + 1 = \boxed{-1}$

$1 + 1 + 1 + 1 = 4$

۳

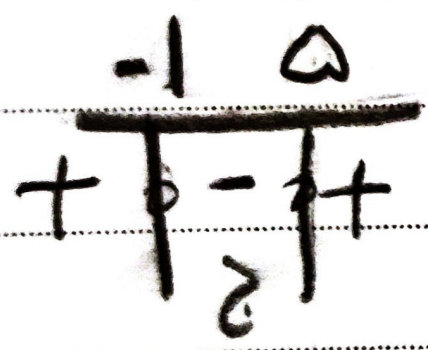
ii

$$-\frac{1}{4}x^2 + 2x + 4 > \frac{1}{4}$$

$$-1 \left(-\frac{1}{4}x^2 + 2x + \frac{17}{4} \right) > 0$$

$$x^2 - 8x - 17 < 0$$

$$(x - a)(x + 1) < 0$$



$$x = -1, a$$

$$(a, b) = (-1, a)$$

$$a - (-1) = 6$$

Arman

SUBJECT: (

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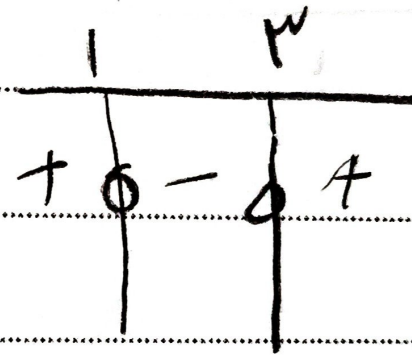
Date:

$$x^{\mu} - \mu x^{\nu} - x + \mu < 0$$

$$(\mu - x)(1 - x^{\nu}) < 0$$

$$x = \mu, 1, -1$$

also $x > 0$



$$a=1, b=\mu$$

$$G_{\text{limit}} = \frac{1 + \mu}{\mu} = \mu$$

$$f(\mu) = 1 - \mu - \mu + \mu = \boxed{-\mu}$$

$$(a-1)x^r + (a-1)x + 1 < 0$$

$$a < 0 \rightarrow a-1 < 0 \rightarrow a < 1 \quad \downarrow$$

$$\Delta < 0 \rightarrow (a-1)^2 - 4(a-1) < 0$$

$$a^2 + 1 - 2a - 4a + 4 < 0 \rightarrow a^2 - 6a + 5 < 0$$

$$(a-1)(a-5) < 0$$

$$\frac{1 \quad 5}{+ \quad - \quad - \quad +}$$

$$1 < a < 5 \quad \downarrow \uparrow$$

$$a \in \emptyset$$

Arman

Subject: ()

Date:

$$\frac{m(m^r + m)}{m - r} > 0 \quad \frac{m^r(m^r + 1)}{m - r} > 0 \quad -f$$

$$\begin{array}{c} 0 \quad r \\ + \phi - \phi + \end{array} \quad (r, +\infty)$$

$$x = r, -r + (x - r)(x + r) \rightarrow x = 1 \quad -V$$

$$\frac{(x^r - x - r)(x - 1)^r}{(x^r + x + 1)(x - r)^r} \leq 0$$

$$\begin{array}{c} -r \quad 1 \quad r \quad r \\ + \phi - \phi - \phi + \phi - \end{array} \quad [-r, r) \cup [r, +\infty)$$

$$\frac{r x^r - r x}{x^r + \epsilon} < r \rightarrow \frac{r x^r - r x^r - r x - 1}{x^r + \epsilon} < 0 \quad -\Delta$$

$$\frac{x^r - r x - 1}{x^r + \epsilon} < 0 \rightarrow \frac{(x - \epsilon)(x + r)}{x^r + \epsilon} < 0$$

$$\begin{array}{c} -1 \quad \epsilon \\ + \phi - \phi + \end{array} \quad (-r, \epsilon) \rightarrow \epsilon - (-r) = \phi$$

$$-1 < \frac{2n^2 - \epsilon n}{n+1} < 0$$

I : $0 < \frac{2n^2 - \epsilon n + n + 1}{n+1} \rightarrow \frac{2n^2 - \epsilon n + 1}{n+1} > \Delta < 0$

$$\frac{-1 \quad 0 \quad 1}{- \frac{\epsilon}{2} + \quad +} \quad (-1, +\infty)$$

II : $\frac{2n^2 - \epsilon n}{n+1} < 0 \rightarrow \frac{n(2n - \epsilon)}{n+1} < 0$

$$\frac{-1 \quad 0 \quad \frac{\epsilon}{2}}{- \frac{\epsilon}{2} + \quad - \quad +} \quad (-\infty, -1) \cup (0, \frac{\epsilon}{2})$$

III : $(0, \frac{\epsilon}{2})$

$$\frac{n^2 - 1}{n} \leq 2 \rightarrow \frac{n^2 - 1 - 2n}{n} \leq 0$$

$$\frac{(n-3)(n+1)}{n} \leq 0$$

$$\frac{-3 \quad 0 \quad 1}{- \frac{1}{n} + \frac{1}{n} - \frac{1}{n} +}$$

$$(-\infty, -1] \cup (0, 1]$$