

۲۰ آفرین

$$a^2 + 2a = a^2 - \epsilon \rightarrow 2a = -\epsilon \rightarrow a = -\frac{\epsilon}{2}$$

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$$\frac{f+a}{f-b} = f+b$$

$$f+b = 3$$

$$b = -1$$

$$\frac{2x^2 + 11}{x^2 + 1} = \frac{f(x)}{g(x)} = \frac{2x}{3}$$

$$\frac{f+a}{g} = 3$$

$$1a = f+a \rightarrow a = 11$$

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$$x^2 + \frac{a}{x} + \frac{b}{x} \Rightarrow (x+1)(x-\epsilon)$$

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

$$\frac{a}{x} = -4 \rightarrow a = -4$$

$$\frac{b}{x} = -\epsilon \rightarrow b = -1$$

$$\frac{a}{x^2 - 4x - 1} = \frac{5}{x^2 - 4x - 1}$$

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$$x^2 - \frac{a}{x} - \frac{b}{x} = (x+1)^2$$

$$-\frac{b}{x} = 1 \rightarrow -b = \epsilon \rightarrow b = -\epsilon$$

$$-\frac{a}{x} = 2 \rightarrow -a = 2 \rightarrow a = -2$$

$$a + b = (-2) + (-1) = -3$$

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$$x^2 + mx + 1 \rightarrow b^2 - 4ac < 0$$

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

$$[-2, 2)$$

جواب

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$$f - \frac{1}{a^r} > 0 \rightarrow \frac{1}{a^r} < f \rightarrow 1 < f a^r \rightarrow \frac{1}{f} < a^r \rightarrow a > \frac{1}{f}, a < -\frac{1}{f} \text{ (II)}$$

$$\hookrightarrow a \neq 0 \rightarrow a \neq 0 \text{ (I)} \quad I \cap II \Rightarrow (-\infty, -\frac{1}{f}] \cup [\frac{1}{f}, +\infty)$$

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$$\Delta \leq 0 \rightarrow f m^2 - f(m) \leq 0 \rightarrow f m(m-1) \leq 0 \quad \frac{0}{+b} - \frac{1}{-b+} \text{ [0;1]}$$

$m^2 - m = 0$
 $m(m-1) = 0$
 $m=1 \rightarrow a=1$
 $m=0 \rightarrow a=0$

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$$r \left(\frac{1}{r} \right) + 1 = f \left(\frac{1}{r} \right) + k \quad r_m - l = 0 \rightarrow r_a = 1$$

$$r = r + k \rightarrow k = 0$$

$$a = \frac{1}{r} \rightarrow a = \frac{1}{r}$$

$$0 + \frac{1}{r} \Rightarrow \frac{1}{r}$$

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$$\frac{a-r}{b} = \frac{a-r+b}{b}$$

$$1 = \frac{a-r}{b} \rightarrow b = a-r$$

$$r \left(-\frac{r}{r} \right) a + r = -\epsilon$$

$$-ra + r = -\epsilon$$

$$-ra = -\epsilon - r$$

$$r - (-r) = \epsilon$$

$$a = \frac{\epsilon}{r}$$

$$r \times \frac{-r}{r} - r = -\epsilon$$

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$$ra^r + ra = r$$

$$ra^r + ra - \epsilon = 0$$

$$a^r + a - r = 0$$

$$(a+r)(a-1)$$

$$-r \text{ or } 1$$

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