

$$a^r + r a = a^r - f$$

$$r a = -f$$

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

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$$f + b = r \quad b = 1$$

$$\frac{f + a}{r} = \frac{f + 1}{r} \quad a = 1$$

$$f(m) = \frac{a^{r+1} - 1}{r a - 1}$$

$$f(1) = \frac{1^{r+1} - 1}{r \cdot 1 - 1} = \frac{1 - 1}{r - 1} = \frac{0}{r - 1} = 0$$

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$$\frac{-1}{r} \quad \frac{f}{r} \quad \frac{r}{r}$$

$$a^r (m+1)(m-r) = a^r (r m^2 - 4m - 1)$$

$$\frac{f_{m+1}}{r m^2 - 4m - 1} = \frac{f + r \omega}{r - 4 \omega} = \frac{-\omega}{r}$$

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$$-f(m+1)^r = -f \frac{2a^r - 1}{a} = \frac{-1}{a} = \frac{-f}{b}$$

$$a + b = -1/r$$

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$$\Delta < 0 \quad m^r - f < 0$$

$$m^r < f$$

$$-r < m < r$$

$$m \in [-r, r)$$

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

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$$x^r \neq 0 \quad x \neq 0$$

$$f - \frac{1}{x^r} \geq 0$$

$$f x^r - 1 \geq 0$$

$$\frac{f x^r}{x^r} \geq \frac{1}{x^r} \quad x > \frac{1}{\sqrt[r]{f}} \quad x \leq -\frac{1}{\sqrt[r]{f}} \quad D_f = \mathbb{R} - \left(-\frac{1}{\sqrt[r]{f}}, \frac{1}{\sqrt[r]{f}}\right)$$

$$a > 0$$

$$m > 0$$

$$\Delta \geq 0$$

$$f m^r - f m \geq 0$$

$$f m(m-1) \geq 0 \quad \frac{1}{+r-b+} \quad m \in [0, 1]$$

$$x = \frac{1}{r} \quad g(m) = f(m)$$

$$1 + 1 = r = r + k$$

$$k = 0$$

$$a \neq x$$

$$r m - 1 \neq 0$$

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

$$x \neq \frac{1}{r}$$

$$a + k = \frac{1}{r}$$

$$x = -\frac{r}{r}$$

$$-r + b = -r + r \rightarrow \begin{matrix} -4 \\ r = -r + r \\ a = r \end{matrix}$$

$$m = 1$$

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

$$\left. \begin{matrix} a - b \\ r + r = 0 \end{matrix} \right\}$$

$$n = r$$

$$f = r a^r + r a$$

$$n = 1$$

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

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

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

$$(a + r)(a - 1) \quad \left\{ \begin{matrix} \hookrightarrow -r \\ \hookrightarrow 1 \end{matrix} \right\}$$