

$$y = \sqrt{nf(m)} \quad y = \sqrt{ny} \quad y^2 = ny$$

-1

$$nf(m) \geq 0$$



$$1 \leq n \leq 2$$

$$-2 \leq n \leq 0$$

$$\theta_p = [-0.5, 0] \cup [1.5, 2]$$

-2

$$\frac{-n}{f(m)} \gg 0$$

$$f(m) \neq 0$$



$$(-2, 2), -\{0\}$$

$$\{-2, -1, 1\} = \overline{\{0\}}$$

-3

$$\frac{f(r) - rf(r)}{-f(r)} = \frac{f - rf + f}{+r} \Rightarrow f(r) = \frac{f}{r} \quad f(m) + f = f + f + f$$

$$f(m) = 1$$

-5

$$f(f(a)) + f(f(r)) = 1$$

-6

$$f(n-1) = a(n-1) - b(n-1) + r \Rightarrow f(n-1) - f(n) = \frac{-ran + a + b}{n+1}$$

$$-ra = r \quad a = -r$$

$$-r - a = -A$$

$$\frac{r(a - a + 1) + (1 + r + 1)}{(a - a + 1)^r} \Rightarrow \frac{r + a}{1} \Rightarrow \checkmark$$

-7

$$\frac{rf(e) - rf(-r)}{f(r)} = \frac{r(1^r) - r(1)}{r+1} = \frac{r^2 - A}{r} = \frac{r}{r}$$

-8

$$\frac{f(1) - f(r)}{f} \Rightarrow \frac{r - r}{e} = 0$$

-9

$$\frac{((\sqrt{x}-1)^2 + (\sqrt{x}-1) + 9)}{((\sqrt{x}-1)^2 + (\sqrt{x}-1) + 2)} \Rightarrow \frac{\cancel{x} + \cancel{1} - \cancel{1}\sqrt{x} + \cancel{1}\sqrt{x} - 1 + 9}{\cancel{x} + \cancel{1} - \cancel{1}\sqrt{x} + \cancel{1}\sqrt{x} - 1 + 2} \Rightarrow \frac{1}{1} = 1$$

$$\frac{1 + 1 + 9}{1 + 1 + 2} = \frac{11}{4}$$

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