

$$4 \times V = 42 \Rightarrow \textcircled{2} = \underline{\underline{0.5}}$$



$$\frac{r^x (1+r+a+rv+\Delta+rfr)}{r^x (\frac{1}{r} + \frac{1}{r} + 1 + r + f + \Delta)} = \Delta r \Rightarrow \frac{r^x \times rfr}{r^x \times \frac{4r}{f}} = \Delta r$$

$$\Rightarrow r^x \times rfr = r^x \times \Delta r \Rightarrow \frac{r^x}{r^x} = \frac{\Delta r}{rfr} = \frac{a}{f} \Rightarrow \left(\frac{r}{r}\right)^x = \left(\frac{r}{r}\right)^x \Rightarrow x=1$$

$$(a^r + b^r - rab)^r (a^r + b^r + rab)^r = ((a^r + b^r)^r - (rab)^r)^r = (a^r + b^r + rab^r - rab^r)^r - 4$$

$$\Rightarrow (a^r + b^r - rab^r)^r = (\sqrt{4} - r + \sqrt{4} + r - r(\sqrt{4} + r \times \sqrt{4} - r))^r$$

$$= (r\sqrt{4} - r\sqrt{4} - r)^r = (r\sqrt{4} - r\sqrt{r})^r \Rightarrow (r\sqrt{4} - r\sqrt{r})^r = f(\sqrt{4} - \sqrt{r})^r = f(4 + r\sqrt{4})$$

$$= f(1 - f\sqrt{r}) = r - 14\sqrt{r} = 14(r - \sqrt{r}) \Rightarrow 14(r - \sqrt{r}) = 14 \Rightarrow r = 14$$

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

$$= (a^r + \frac{1}{a^r})^r = a^r + \frac{1}{a^r} + r \xrightarrow{a = \sqrt{4} - f\sqrt{r}} \sqrt{4} - f\sqrt{r} + \frac{1}{\sqrt{4} - f\sqrt{r}} + r$$

$$= \sqrt{4} - f\sqrt{r} + \sqrt{4} + f\sqrt{r} + r = 14 + r = 14 = r^f = r^1 \Rightarrow r = 14$$

$$A = \sqrt[9]{f^r \sqrt{14}} \times \left(\frac{1}{r}\right)^{-\frac{f}{r}} = r^{\frac{r}{9}} \times r^{\frac{f}{9}} \times r^{\frac{f}{9}} = r^{\frac{4+f+r}{9}} = r^{\frac{r}{9}} \quad (\Delta)$$

$$= r^r \Rightarrow A = f \Rightarrow (rA)^{-\frac{1}{r}} = \Delta^{-\frac{1}{r}} = \frac{1}{r\sqrt{\Delta}} = \frac{1}{r}$$

$$a^{\frac{1}{r}} = r^r \times a^{\frac{1}{r}} \Rightarrow a^{\frac{1}{r}} = r^{-r} \Rightarrow a^r = r^{-r} \Rightarrow a = r^{-\frac{r}{r}} \Rightarrow a = \frac{1}{r}$$

$$\Rightarrow \frac{1}{a} - r = r\sqrt{r} - r \Rightarrow \frac{\frac{1}{a} - r}{1 + \sqrt{r}} = \frac{r\sqrt{r} - r}{1 + \sqrt{r}} \times \frac{1 - \sqrt{r}}{1 - \sqrt{r}} = \frac{r\sqrt{r} - a - r + rf}{1 - r}$$

$$\Rightarrow \frac{r(4 - r\sqrt{r})}{r} = r - r\sqrt{r}$$

$$(\sqrt{x+a} + \sqrt{x-f})(\sqrt{x+a} - \sqrt{x-f}) = (a+a) - (a-f) = a+f$$

$$\Rightarrow \frac{a}{r} + r \leq \frac{a+f}{r}$$

$$\sqrt{x+a} + \sqrt{x-f} = \frac{a}{r} + r \rightarrow \sqrt{x+a} + \sqrt{x-f} - r = \frac{a}{r} + r - r = \frac{a}{r}$$