

Scanned with CamScanner

$$((a-b)^r)^r ((a+b)^r)^r = (a-b)^{2r} (a+b)^{2r} = (a^r - b^r)^{2r} = (a^r + b^r - 2a^r b^r)^r$$

$$(\sqrt{4} + r + \sqrt{4} - r - r\sqrt{4-r})^r = (r\sqrt{4} - r\sqrt{r})^r = r^{2r+1} - 14\sqrt{r} = r^{2r+1} - 14\sqrt{r} = 14(r - \sqrt{r})$$

$\Rightarrow t = 14$

$$a = \sqrt[r]{(r - \sqrt{r})^r} = \sqrt{r - \sqrt{r}}$$

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

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

$$= (r - \sqrt{r} + \frac{1}{r - \sqrt{r}})^r = (r - \sqrt{r} + r + \sqrt{r})^r = r^r = 14 \Rightarrow r^t = 14 \Rightarrow t = r$$

$$A = \sqrt[r]{\frac{r}{\sqrt{r}^{10}}} \times r^{\frac{r}{r}} = r^{\frac{r}{r}} \times r^{\frac{r}{r}} = r^r = r \Rightarrow (rA)^{-\frac{1}{r}} = \sqrt[r]{\frac{1}{\lambda}} = \boxed{\frac{1}{r}}$$

$$\frac{a^{\frac{1}{\sqrt{r}}}}{a^{\frac{10}{\sqrt{r}}}} = r^r \Rightarrow a^{-r} = r^r \Rightarrow \frac{1}{a^r} = r^r \Rightarrow a^r = \frac{1}{r^r} \Rightarrow a = \frac{1}{r\sqrt{r}}$$

$$\frac{r\sqrt{r} - r}{1 + \sqrt{r}} = \frac{r(\sqrt{r} - 1)}{\sqrt{r} + 1} \times \frac{\sqrt{r} - 1}{\sqrt{r} - 1} = \frac{r(\sqrt{r} - 1)^2}{r} = \frac{r(r - 2\sqrt{r})}{r}$$

$= \boxed{r(r - \sqrt{r})}$ برابر

$$\sqrt{x+a} = z \text{ , } \sqrt{x-r} = t$$

$$z - t = r \Rightarrow z + t = y \Rightarrow z^r - t^r = ry \Rightarrow a + a - x + r = ry \Rightarrow \boxed{r + a = ry}$$

$$z + t - r = ? \Rightarrow \cancel{r} + \frac{a}{r} - \cancel{r} = ? \Rightarrow \boxed{\text{جواب} = \frac{a}{r}}$$

$$\frac{r+a}{r}$$