



دبرای پراثرتر از هم داریم :

$$\Rightarrow f_{X \vee Y} = K(r)$$

در نتیجه رقم بالا ۲۵ سر به سر

$$\left(\frac{(1+\sqrt{v})^{\frac{1}{v}}}{v^{\frac{1}{v}}}\right)^{\frac{1}{v}} = \frac{(1+\sqrt{v})^{\frac{1}{v}}}{v^{\frac{1}{v}}} \Rightarrow A = \frac{1}{\frac{(1+\sqrt{v})^{\frac{1}{v}}}{v^{\frac{1}{v}}}} \times (1+\sqrt{v})^{\frac{1}{v}} = \frac{v^{\frac{1}{v}}}{(1+\sqrt{v})^{\frac{1}{v}}} \times (1+\sqrt{v})^{\frac{1}{v}} = A$$

الف) $\frac{\sqrt{1 + \sqrt{4}(a + \sqrt{4})}}{a - \sqrt{4}(a + \sqrt{4})} - 2 \left(\sqrt[3]{\frac{1}{9}} - 1 \right)^{-1} = \frac{a\sqrt{1} + a\sqrt{4} + \sqrt{4}\sqrt{4} + \sqrt{4}\sqrt{4} - 19\sqrt{4} - 19}{19}$ (3)

$$\frac{\sqrt{13}-1}{8+\sqrt{13}} \times \frac{(8-\sqrt{13})}{(8-\sqrt{13})} = \frac{13\sqrt{13}-8-9+\sqrt{13}}{13-13} = \frac{13\sqrt{13}-17}{0}$$

۱۵ - ۱۲√۳ جواب

$$\Rightarrow \sqrt[5]{r^5} \times \sqrt[5]{4r^5} \times \sqrt[5]{r^5} \Rightarrow \sqrt[5]{r^5 \times 4r^5 \times r^5} = \sqrt[5]{r^5} \times \sqrt[5]{4r^5} \times \sqrt[5]{r^5}$$

$$x^2 + \frac{1}{x^2} + \frac{1}{x^2} = \frac{1 + x^2 + 1}{x^2} \quad x^2 = 1 \times x^2 = (1x) \checkmark$$

$$A = \frac{\sqrt{\frac{r}{r^2} \sqrt{\frac{1}{r^2}}}}{\sqrt{\frac{r}{r^2} \sqrt{\frac{1}{r^2}}}} \left(\frac{1}{r}\right)^{-\frac{r}{2}} \quad (rA)^{-\frac{1}{r}} = ? \quad \left(\frac{1}{r}\right) \quad \textcircled{9}$$

$$\Rightarrow \textcircled{A} = r^{\frac{r}{2}} \times r^{\frac{r}{2}} \Rightarrow r^{\frac{r}{2} + \frac{r}{2}} = r^r = \left(\frac{1}{r}\right)$$

$$\left(\frac{1}{r}\right)^{-\frac{1}{r}} = r^{-1} \Rightarrow \left(\frac{1}{r}\right)$$

$$\sqrt[r]{a} = r \sqrt[r]{a^{10}} \quad \frac{\frac{1}{a} - r}{1 + \sqrt{r}} = ? \quad \textcircled{9}$$

$$a^{\frac{1}{r}} = r^r \times a^{\frac{10}{r}} \Rightarrow a^{\frac{1}{r} - \frac{10}{r}} = r^r \Rightarrow a^{-\frac{9}{r}} = r^r \Rightarrow \left(\frac{1}{a}\right)^r = r^r$$

$$\left(\frac{1}{a}\right)^r = r^r \Rightarrow \frac{1}{a} = r \sqrt[r]{r} \Rightarrow \frac{r \sqrt[r]{r} - r}{1 + \sqrt{r}} = \frac{r(\sqrt[r]{r} - 1)(1 - \sqrt{r})}{(1 + \sqrt{r})(1 - \sqrt{r})}$$

$$\frac{r(-\sqrt{r} + \sqrt[r]{r})}{1 - r} = \frac{-r\sqrt{r} + r\sqrt[r]{r}}{1 - r} = \frac{-r(1 - \sqrt{r})}{-r} = \boxed{1 - \sqrt{r}}$$

$$\frac{\sqrt{a+b}}{a} - \frac{\sqrt{a-b}}{b} = r \Rightarrow \frac{\sqrt{a+b}}{a} + \frac{\sqrt{a-b}}{b} - r = ? \Rightarrow \frac{a}{r} \quad \textcircled{10}$$

$$(a-b) = r^r \quad \frac{(a+b)}{a+b} - r = \frac{a+b}{r} - \frac{r}{r} = \left(\frac{a}{r}\right)$$

$$\frac{(a-b)(a+b)}{r} = a^r - b^r \Rightarrow r(a+b) = a^r - b^r \Rightarrow r(a+b) = r + a = r + b$$

$$r(a+b) = r + b \Rightarrow \boxed{a+b = \frac{a+b}{r}}$$