

۴ از عدد ۱۵ به هر مبداء حاصل آوید داریم لیکن عدد حاصل می شود و حدیث با جمع
این هم رقم لیکن مندر است پس عدد ها را قبل از ابداء را می بینیم که لیکن را
به دست می آوریم.

$$\frac{r_{x1}}{r} + \frac{r_x r_y r_{x1}}{r_k} = r_g$$

$4 \times 5 = 20 \rightarrow \boxed{\text{رقم بیان} = 2}$

النتيجة $\sqrt{(x + \sqrt{x})^{-1}} \sqrt{1 + \sqrt{x}} \xrightarrow[\text{تقريب}]{\text{تقريب}} \sqrt{(x + \sqrt{x})^{-1}} \sqrt{(1 + \sqrt{x})^2} \rightarrow \sqrt{\frac{(1 + \sqrt{x})^2}{x + \sqrt{x}}} = \sqrt{\frac{1 + 2\sqrt{x}}{x + \sqrt{x}}} = \sqrt{\frac{x + \sqrt{x}}{x + \sqrt{x}}} = 1$

جواب

$$\text{ب. } \left(\frac{\sqrt{r} + \sqrt{a}}{\sqrt{a} + r} \right) (\sqrt{r} - \sqrt{a} - \sqrt{r} + \sqrt{a}) = \left(\frac{\sqrt{r} + \sqrt{a}}{\sqrt{a} \times \sqrt{r} + r} \right) = \frac{\sqrt{r} + \sqrt{a}}{\sqrt{r} (\sqrt{a} + r)} = \frac{1}{\sqrt{r}} \leftarrow \text{پایانه اول}$$

$$\text{برای انتگرال دهیم} \rightarrow (\sqrt{x-50} - \sqrt{x+50})^r = (x + \sqrt{d} + x - \sqrt{d} - r\sqrt{(x-\sqrt{d})(x+\sqrt{d})}) = 4-x\sqrt{\frac{k}{r}} = 4-k = 9$$

مربع $\rightarrow -\sqrt{2} \rightarrow \frac{1}{\sqrt{2}} \times -\sqrt{2} = -1$ جواب

مفتی اسعد دین
عبادت اول از عبادت دوم
نوح کتر است

$$\text{الف) } \frac{\sqrt{x} + \sqrt{5}}{x - \sqrt{4}} \cdot \frac{(\sqrt{5} - 1)^{-1}}{\sqrt{5} - 1} \rightarrow \frac{2\sqrt{x} + 2\sqrt{5}}{x - \sqrt{4}} \cdot \frac{2}{\sqrt{5} - 1} \cdot \frac{2\sqrt{x} + 2\sqrt{5}}{x - \sqrt{4}} \cdot \frac{4 + 5}{4 + \sqrt{4}} =$$

$$\frac{(2\sqrt{2} + 4\sqrt{2})(5 + \sqrt{2})}{25 - 2} = \frac{10\sqrt{2} + 10\sqrt{2} + 2\sqrt{2} + 2\sqrt{2}}{19} = \frac{14\sqrt{2} + 14\sqrt{2}}{19} = \frac{14(2\sqrt{2} + \sqrt{2})}{19} = \frac{14(3\sqrt{2})}{19} = \frac{42\sqrt{2}}{19}$$

$$\frac{19}{\sqrt{3}-1} \times \frac{\sqrt{3}+1}{\sqrt{3}+1} = \frac{19(\sqrt{3}+1)}{3-1} = \frac{19(\sqrt{3}+1)}{2} = \frac{19\sqrt{3}+19}{2}$$

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

$$\frac{1}{x - \sqrt{x}} \times \frac{x + \sqrt{x}}{x + \sqrt{x}} = \frac{x + \sqrt{x}}{x - x} = \frac{x + \sqrt{x}}{0} \rightarrow \sqrt{x} - 1 + 1 + \sqrt{x} = \boxed{2\sqrt{x} + 1} \text{ جواب}$$

$$\text{ان} \left(\frac{\sqrt{1+\sqrt{2}} + \sqrt{\sqrt{2}-1}}{\sqrt{\sqrt{2}-\sqrt{2}}} \right)^2 \rightarrow \frac{1+\sqrt{2} + (\sqrt{2}-1) + 2(\sqrt{2}-1)}{\sqrt{2} + \sqrt{2}} = \frac{2\sqrt{2} + \sqrt{2}}{2\sqrt{2}} \rightarrow \sqrt{2\sqrt{2} + \sqrt{2}} = \sqrt{\frac{2\sqrt{2} + \sqrt{2}}{\sqrt{2}-\sqrt{2}}} = \sqrt{1 + 2\sqrt{2}} = \sqrt{(\sqrt{2}+1)^2} = 1 + \sqrt{2} \quad \checkmark$$

جواب $\sqrt{4}$

$$\text{جواب: } \sqrt[4]{x^4} \times \sqrt[4]{x^4} \times \sqrt[4]{x^4} = \sqrt[4]{x^4} \times \sqrt[4]{x^4 x^4} \times \sqrt[4]{x^4} = \sqrt[4]{x^4} \times \sqrt[4]{x^8} \times \sqrt[4]{x^4} =$$

$$15 \sqrt{\begin{array}{cc} 22 & 12 \\ 2 & 3 \end{array}} = 3 \times 2^2 = 4 \times 3 = 12 \text{ جواب}$$

$$\frac{r^x + r^{x+1} + r^{x+2} + r^{x+3} + r^{x+4} + r^{x+5}}{r^{x-1} + r^x + r^{x+1} + r^{x+2} + r^{x+3} + r^{x+4}} = \frac{\Delta r}{r^x \Delta r} \rightarrow \frac{r^x (r^1 + r^2 + r^3 + r^4 + r^5)}{r^x (r^{-1} + 1 + r + r^2 + r^3 + r^4)} = r^r \times 11$$

$$\frac{r^u \times r^v}{r^u \times \frac{r^v}{r}} = \left(\frac{r}{r}\right)^u \times \frac{r^v \times r}{r^v} = \frac{r \times r}{r} = r \times 1 = r \rightarrow \frac{r \times r}{r^r} \times \left(\frac{r}{r}\right)^u = r^r \times 1 = r^r \rightarrow \boxed{x = r} \text{ جواب}$$

$$(a^2 + b^2 - 2ab)^2 (a^2 + b^2 + 2ab)^2 = 2(2 - \sqrt{2})$$

$$b = \sqrt[4]{2\sqrt{2} + 2} \quad a = \sqrt[4]{2\sqrt{2} - 2}$$

$$((a-b)^2)^2 ((a+b)^2)^2 \rightarrow (((a-b)(a+b))^2)^2 = ((a^2 - b^2)^2)^2 = (a^4 - 2a^2b^2 + b^4)^2 =$$

$$(\sqrt{2} - 2 - 2\sqrt{(2\sqrt{2}+2)(2\sqrt{2}-2)} + \sqrt{2} + 2)^2 = (2\sqrt{2} - 2\sqrt{2})^2 = (2(\sqrt{2} - \sqrt{2}))^2 = (2(0))^2 = 0 \times (2(2 - \sqrt{2})) = \frac{14(2 - \sqrt{2})}{2}$$

$2 - 2 = 0$

جواب: $\boxed{14}$

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

$$a = \sqrt[4]{2\sqrt{2} - 2}$$

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

$$\sqrt{2} - 2\sqrt{2} + \frac{1 + 2\sqrt{2}}{2 - 4} + 2 = \sqrt{2} - 2\sqrt{2} + \frac{1 + 2\sqrt{2}}{-2} + 2 = \sqrt{2} - 2\sqrt{2} - \frac{1}{2} - \sqrt{2} + 2 = -\frac{1}{2} - \sqrt{2} + \sqrt{2} = -\frac{1}{2}$$

$14 = 2^2 \rightarrow 2^2 = 4 \rightarrow \boxed{4}$

$$A = \sqrt[4]{2\sqrt{2} - 2} \left(\frac{1}{r}\right)^{\frac{2}{3}}$$

$$(2A)^{\frac{1}{3}} = ? \rightarrow A = \sqrt[4]{2\sqrt{2} - 2} \times r^{\frac{2}{3}} \rightarrow \sqrt[4]{2\sqrt{2} - 2} \times r^{\frac{2}{3}} \rightarrow$$

$$\frac{1}{r^{\frac{2}{3}}} \times r^{\frac{2}{3}} = r^{\frac{2}{3} - \frac{2}{3}} = r^0 = 1$$

$$\rightarrow 2A = 2 \times 1 = 2 \quad (2A)^{\frac{1}{3}} = (2)^{\frac{1}{3}} = 2^{\frac{1}{3}} = \boxed{\left(\frac{1}{r}\right)} \text{ جواب}$$

$$\sqrt[4]{a} = 2\sqrt[4]{a} \rightarrow a = 2\sqrt[4]{a} \rightarrow \frac{a}{2} = \sqrt[4]{a} \rightarrow a^{\frac{1}{4}} = 2^{-\frac{1}{4}} \rightarrow a^{\frac{1}{4}} = 2^{-\frac{1}{4}} \rightarrow a = 2^{-1}$$

$$\frac{1}{a} - 2 \rightarrow \frac{1}{2^{-1}} - 2 = \frac{1}{2^{-1}} - 2 = 2^{\frac{1}{4}} - 2 \rightarrow 2(2^{\frac{1}{4}} - 1) = 2(\sqrt{2} - 1)$$

$$\frac{2(\sqrt{2} - 1)}{\sqrt{2} + 1} \times \frac{\sqrt{2} - 1}{\sqrt{2} - 1} = \frac{2(\sqrt{2} - 1)^2}{2 - 1} = \frac{2(2 - 2\sqrt{2} + 1)}{1} = 2(3 - 2\sqrt{2}) = 2(2 - \sqrt{2}) = \boxed{4 - 2\sqrt{2}} \text{ جواب}$$

$$\sqrt{x+a} - \sqrt{x-a} = 2$$

$$\sqrt{x+a} + \sqrt{x-a} = ?$$

$$(\sqrt{x+a} - \sqrt{x-a})(\sqrt{x+a} + \sqrt{x-a}) = x+a - x+a = a+a \rightarrow \sqrt{x+a} + \sqrt{x-a} = \frac{a+a}{2}$$

$$\frac{a+a}{2} - 2 = \frac{a+a}{2} = \boxed{\frac{a}{2}} \text{ جواب}$$