

(۲۷)

مهر ۱۳

ایستاد

$$(1+4+0+0+ \dots) \times (2+4+0+0+ \dots) = 5 \times 4 = 20$$

①

$$\sqrt[4]{(x+\sqrt{x})^{-1}} \sqrt{x+\sqrt{x}} = (x+\sqrt{x})^{-\frac{1}{4}} (x+\sqrt{x})^{\frac{1}{4}} = \frac{(x+\sqrt{x})^{\frac{1}{4}}}{(x+\sqrt{x})^{\frac{1}{4}}} \quad \text{انف} \quad (۲)$$

$$\Rightarrow \left(\frac{(x+\sqrt{x})}{x+\sqrt{x}} \right)^{\frac{1}{4}} = x^{\frac{1}{4}} \cdot \sqrt[4]{x}$$

(۳)

$$\sqrt{x+\sqrt{x}} = \frac{\sqrt{x}+1}{\sqrt{x}} = \frac{\sqrt{x}-1}{\sqrt{x}} \cdot \frac{\sqrt{x}+1}{\sqrt{x}} \cdot \sqrt{x} \quad \text{انف}$$

$$\frac{\sqrt{x+\sqrt{x}}}{\sqrt{x}+1} \times (-\sqrt{x}) = -1 \quad \text{انف}$$

③

$$\frac{\sqrt{x}+\sqrt{x}}{x-\sqrt{x}} = \frac{2\sqrt{x}}{x-\sqrt{x}} = \frac{2\sqrt{x}}{\sqrt{x}(\sqrt{x}-1)} = \frac{2}{\sqrt{x}-1} \quad \text{انف}$$

$$\Rightarrow \frac{1 \cdot (\sqrt{x}+\sqrt{x})}{1} \cdot \sqrt{x} = \sqrt{x} + \sqrt{x}$$

$$\frac{2\sqrt{x}-1}{\sqrt{x}+1} + \frac{1}{\sqrt{x}-1} = \frac{1}{\sqrt{x}-1} \cdot \frac{2\sqrt{x}+1}{\sqrt{x}+1} \quad \text{انف}$$

$$\Rightarrow \frac{2\sqrt{x}}{1} = \frac{2\sqrt{x}-1}{\sqrt{x}+1} \cdot \frac{\sqrt{x}-1}{\sqrt{x}-1} = 1-\sqrt{x}$$

$$2+\sqrt{x}+1-\sqrt{x} = 3 \quad \text{انف}$$

