

۱۲۶ - حاصل عبارت $2(\sqrt{9}-1)^{-1} \cdot \frac{\sqrt{8}+\sqrt{27}}{5-\sqrt{6}}$ کدام است؟

$$\sqrt{2}-2\sqrt{3} \quad (f)$$

$$1-\sqrt{2} \quad (g)$$

$$-1+\sqrt{2} \quad (h)$$

$$1+\sqrt{2} \quad (i)$$

$$\frac{1\sqrt{2}+1\sqrt{3}}{5-\sqrt{6}} \times \frac{5+\sqrt{6}}{5+\sqrt{6}} = \frac{10\sqrt{2}+10\sqrt{3} + \cancel{1\sqrt{2}\sqrt{6}} + \cancel{1\sqrt{3}\sqrt{6}}}{25-6} = \frac{10\sqrt{2}+10\sqrt{3}}{19}$$

$$\rightarrow \sqrt{2} + \sqrt{3}$$

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

$$\sqrt{3} + \sqrt{3} - \sqrt{3} - 1 = \sqrt{3} - 1$$