

PAKET I EKSPONEN, LOGARITMA & AKAR	NAMA	:	
	Kelas	:	
	No. Absen	:	

1. Hitunglah nilai dari :

$$\frac{(27)^{2/3} + (\frac{1}{2})^{-4}}{5^2}$$

Jawab :

$$\begin{aligned} \frac{(27)^{2/3} + (\frac{1}{2})^{-4}}{5^2} &= \frac{(\dots^3)^{2/3} + (\dots^{-1})^{-4}}{\dots} = \frac{(\dots)^{6/3} + \dots^4}{\dots} = \frac{\dots^2 + \dots}{\dots} \\ &= \frac{\dots + \dots}{\dots} \\ &= \frac{\dots}{\dots} = \dots \end{aligned}$$

2. Sederhanakan bentuk dari :

$$\sqrt{2} + \sqrt{8} + 3\sqrt{2} - \sqrt{12} + \sqrt{3}$$

Jawab :

$$\begin{aligned} \sqrt{2} + \sqrt{8} + 3\sqrt{2} - \sqrt{12} + \sqrt{3} &= \sqrt{2} + \sqrt{\dots \cdot 2} + 3\sqrt{2} - \sqrt{\dots \cdot 3} + \sqrt{3} \\ &= \sqrt{2} + \sqrt{\dots} \cdot \sqrt{2} + 3\sqrt{2} - \sqrt{\dots} \cdot \sqrt{3} + \sqrt{3} \\ &= \sqrt{2} + \dots \cdot \sqrt{2} + 3\sqrt{2} - \dots \cdot \sqrt{3} + \sqrt{3} \\ &= (\dots + \dots + \dots) \sqrt{2} + (\dots + \dots) \sqrt{3} \\ &= \dots \sqrt{2} - \sqrt{3} \end{aligned}$$

3. Rasionalkan penyebut pecahan dari:

$$\frac{5}{3 + 2\sqrt{2}}$$

Jawab:

$$\begin{aligned} \frac{5}{3 + 2\sqrt{2}} &= \frac{5}{3 + 2\sqrt{2}} \cdot \frac{3 - 2\sqrt{2}}{3 - 2\sqrt{2}} = \frac{\dots(3 - 2\sqrt{2})}{\dots - \dots} = \dots(3 - 2\sqrt{2}) \\ &= \dots - \dots\sqrt{2} \end{aligned}$$

4. Hitunglah nilai dari :

$$6_{\log 9} - 6_{\log 12} + 6_{\log 8}$$

Jawab:

$$6_{\log 9} - 6_{\log 12} + 6_{\log 8} = 6_{\log \frac{\dots \times \dots}{\dots}} = 6_{\log \frac{\dots}{\dots}} = 6_{\log \dots} = \dots$$