

NAMA :

MAPEL : Matematika

KELAS : IX

MATERI : Merasionalkan bentuk akar

No Responsi

01

Ucapkanlah basmalah dan doa! Semoga Allah *Azza wa Jalla* memudahkanmu dalam menjawab soal.

1. Rasionalkan bentuk akar di bawah ini dengan tepat!

a. $\frac{1}{\sqrt{3}} = \frac{1}{\sqrt{3}} \times \frac{\sqrt{\dots}}{\sqrt{\dots}}$ $= \frac{1 \cdot \sqrt{\dots}}{\sqrt{3} \cdot \sqrt{\dots}}$ $= \frac{\sqrt{\dots}}{\dots}$	b. $\frac{2}{\sqrt{6}} = \frac{2}{\sqrt{6}} \times \frac{\sqrt{\dots}}{\sqrt{\dots}}$ $= \frac{2 \cdot \sqrt{\dots}}{\sqrt{6} \cdot \sqrt{\dots}}$ $= \frac{2\sqrt{\dots}}{\dots}$ $= \frac{\dots}{\dots} \sqrt{\dots}$
c. $\frac{1}{2+\sqrt{3}} = \frac{1}{2+\sqrt{3}} \times \frac{\dots - \sqrt{\dots}}{\dots - \sqrt{\dots}}$ $= \frac{1 \cdot (\dots - \sqrt{\dots})}{\dots - \dots}$ $= \frac{\dots - \sqrt{\dots}}{\dots}$ $= \dots - \sqrt{\dots}$	d. $\frac{3}{2+\sqrt{3}} = \frac{3}{2+\sqrt{3}} \times \frac{\dots - \sqrt{\dots}}{\dots - \sqrt{\dots}}$ $= \frac{3 \cdot (\dots - \sqrt{\dots})}{\dots - \dots}$ $= \frac{\dots - \sqrt{\dots}}{\dots}$ $= \dots - \sqrt{\dots}$
e. $\frac{2}{4-\sqrt{6}} = \frac{2}{4-\sqrt{6}} \times \frac{\dots + \sqrt{\dots}}{\dots + \sqrt{\dots}}$ $= \frac{2 \cdot (\dots + \sqrt{\dots})}{\dots - \dots}$ $= \frac{\dots + 2\sqrt{\dots}}{\dots}$	f. $\frac{8}{2-\sqrt{3}} = \frac{8}{2-\sqrt{3}} \times \frac{\dots + \sqrt{\dots}}{\dots + \sqrt{\dots}}$ $= \frac{8 \cdot (\dots + \sqrt{\dots})}{\dots - \dots}$ $= \frac{\dots + 8\sqrt{\dots}}{\dots}$ $= \dots - \sqrt{\dots}$

g.
$$\frac{2}{\sqrt{8}+\sqrt{6}} = \frac{2}{\sqrt{8}+\sqrt{6}} \times \frac{\sqrt{...}-\sqrt{...}}{\sqrt{...}-\sqrt{...}}$$

$$= \frac{2.(\sqrt{...}-\sqrt{...})}{.....-.....}$$

$$= \frac{2(\sqrt{...}-\sqrt{...})}{...}$$

$$= \sqrt{.....} - \sqrt{.....}$$

h.
$$\frac{14}{\sqrt{5}-\sqrt{3}} = \frac{14}{\sqrt{5}-\sqrt{3}} \times \frac{\sqrt{...}+\sqrt{...}}{\sqrt{...}+\sqrt{...}}$$

$$= \frac{14.(\sqrt{...}+\sqrt{...})}{.....-.....}$$

$$= \frac{14(\sqrt{...}+\sqrt{...})}{...}$$

$$= ...(\sqrt{.....} + \sqrt{.....})$$

Pesan/Nasihat: Bertawakal kepada Allah *Azza wa Jalla* usai mengerjakan soal dan terus semangat untuk bersegera dalam kebaikan!