

# 분모( $\sqrt{a}$ )의 유리화

(Rationalization of Denominator( $\sqrt{a}$ ))



$$\frac{\sqrt{a}}{\sqrt{b}}$$

$$\frac{\sqrt{a}}{\sqrt{b}} = \frac{\sqrt{a}\sqrt{b}}{\sqrt{b}\sqrt{b}}$$

$$\frac{\sqrt{a}}{\sqrt{b}} = \frac{\sqrt{a}\sqrt{b}}{\sqrt{b}\sqrt{b}} = \frac{\sqrt{a}\sqrt{b}}{b}$$

$$\begin{aligned}\frac{\sqrt{a}}{\sqrt{b}} &= \frac{\sqrt{a}\sqrt{b}}{\sqrt{b}\sqrt{b}} = \frac{\sqrt{a}\sqrt{b}}{b} \\ &= \frac{\sqrt{ab}}{b}\end{aligned}$$

$$\begin{aligned}\frac{\sqrt{a}}{\sqrt{b}} &= \frac{\sqrt{a}\sqrt{b}}{\sqrt{b}\sqrt{b}} = \frac{\sqrt{a}\sqrt{b}}{b} \\ &= \frac{\sqrt{ab}}{b}\end{aligned}$$

∴

$$\frac{\sqrt{a}}{\sqrt{b}} = \frac{\sqrt{a}\sqrt{b}}{\sqrt{b}\sqrt{b}} = \frac{\sqrt{a}\sqrt{b}}{b}$$

$$= \frac{\sqrt{ab}}{b}$$

$$\therefore \frac{\sqrt{a}}{\sqrt{b}} = \frac{\sqrt{ab}}{b} \quad (a \geq 0, b > 0)$$

$$\frac{\sqrt{a}}{\sqrt{b}} = \frac{\sqrt{a}\sqrt{b}}{\sqrt{b}\sqrt{b}} = \frac{\sqrt{a}\sqrt{b}}{b}$$

$$= \frac{\sqrt{ab}}{b}$$

$$\therefore \frac{\sqrt{a}}{\sqrt{b}} = \frac{\sqrt{ab}}{b} \quad (a \geq 0, b > 0)$$

github:

<https://min7014.github.io/math20200106003.html>

Click or paste URL into the URL search bar, and you can see a picture moving.