

Đáp án bài 29 trang 19 SGK toán đại số lớp 9 tập 1

Đề bài:

Tính:

$$\text{a) } \frac{\sqrt{2}}{\sqrt{18}};$$

$$\text{b) } \frac{\sqrt{15}}{\sqrt{735}};$$

$$\text{c) } \frac{\sqrt{12500}}{\sqrt{500}};$$

$$\text{d) } \frac{\sqrt{6^5}}{\sqrt{2^3 \cdot 3^5}}.$$

Đáp án:

$$\text{a) } \frac{\sqrt{2}}{\sqrt{18}} = \sqrt{\frac{2}{18}} = \sqrt{\frac{2.1}{2.9}} = \sqrt{\frac{1}{9}} = \sqrt{\left(\frac{1}{3}\right)^2} = \frac{1}{3}.$$

$$\begin{aligned} \text{b) } \frac{\sqrt{15}}{\sqrt{735}} &= \sqrt{\frac{15}{735}} = \sqrt{\frac{15.1}{15.49}} = \sqrt{\frac{1}{49}} = \sqrt{\left(\frac{1}{7}\right)^2} \\ &= \frac{1}{7}. \end{aligned}$$

$$\begin{aligned} \text{c) } \frac{\sqrt{12500}}{\sqrt{500}} &= \sqrt{\frac{12500}{500}} = \sqrt{\frac{500.25}{500}} \\ &= \sqrt{25} = \sqrt{5^2} = 5. \end{aligned}$$

$$\begin{aligned} \text{d) } \frac{\sqrt{6^5}}{\sqrt{2^3 \cdot 3^5}} &= \sqrt{\frac{6^5}{2^3 \cdot 3^5}} = \sqrt{\frac{(2.3)^5}{2^3 \cdot 3^5}} = \sqrt{\frac{2^5 \cdot 3^5}{2^3 \cdot 3^5}} \\ &= \sqrt{\frac{2^5 \cdot 3^5}{2^3 \cdot 3^5}} = \sqrt{\frac{2^5}{2^3}} = \sqrt{\frac{2^3 \cdot 2^2}{2^3}} = \sqrt{2^2} = 2 \end{aligned}$$