



Rationalizing the Denominator With a Single Radical in the Denominator

Procedure: 1. Multiply by ONE in the fractional form using a single radical so the index matches the exponent.

Example:

$$\begin{aligned}\text{Simplify } \frac{2}{\sqrt{3}}. \\ \frac{2}{\sqrt{3}} &\rightarrow \frac{2}{\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = \frac{2\sqrt{3}}{(\sqrt{3})^2}, \\ &= \frac{2\sqrt{3}}{3}.\end{aligned}$$

Simplify the following.

1. $\frac{4}{\sqrt{5}}$

2. $\frac{7}{\sqrt{2}}$

3. $\frac{6}{2\sqrt{3}}$

4. $\frac{2}{\sqrt{6}}$

5. $\frac{1}{3\sqrt{7}}$

6. $\frac{5}{\sqrt{10}}$

7. $\frac{8}{3\sqrt{11}}$

8. $\frac{3}{\sqrt{12}}$

9. $\frac{3}{2\sqrt{18}}$