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:

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

$$\frac{2}{\sqrt{3}} \rightarrow \frac{2}{\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = \frac{2\sqrt{3}}{\left(\sqrt{3}\right)^2},$$

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

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