Rationalizing the Denominator

To rationalize the denominator, multiply top and bottom by the radical

When multiplying a radical by itself, the radical cancels out

Rationalize the following denominators

1. $\dfrac{2}{\sqrt{5}} \cdot \dfrac{\sqrt{5}}{\sqrt{5}}$ $\dfrac{2\sqrt{5}}{5}$

2. $\dfrac{-7}{\sqrt{11}} \cdot \dfrac{\sqrt{11}}{\sqrt{11}}$ $\dfrac{-7\sqrt{11}}{11}$

3. $\dfrac{3}{\sqrt{2}} \cdot \dfrac{\sqrt{2}}{\sqrt{2}}$ $\dfrac{3\sqrt{2}}{2}$

4. $\dfrac{6}{\sqrt{3}} \cdot \dfrac{\sqrt{3}}{\sqrt{3}}$ $\dfrac{2 \cdot 6\sqrt{3}}{1 \cdot 3}$ $2\sqrt{3}$

5. $\dfrac{4}{\sqrt{6}} \cdot \dfrac{\sqrt{6}}{\sqrt{6}}$ $\dfrac{24\sqrt{6}}{3\cdot 6}$

   $\dfrac{2\sqrt{6}}{3}$

6. $\dfrac{-5}{\sqrt{10}} \cdot \dfrac{\sqrt{10}}{\sqrt{10}}$ $\dfrac{-\overset{1}{8}\sqrt{10}}{\underset{2}{10}}$ $\dfrac{-\sqrt{10}}{2}$

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