

$$\text{Ex 1: } \frac{1}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}}$$

$$= \frac{1\sqrt{3}}{3} = \boxed{\frac{\sqrt{3}}{3}}$$

1. Multiply top
and bottom by
the radical

2. reduce

$$\text{Ex 2: } \frac{15}{\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{15\sqrt{5}}{5} = \boxed{3\sqrt{5}}$$

$$\text{Ex 3: } \frac{1}{4\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{4 \cdot 2} = \frac{\sqrt{2}}{8}$$

$$\sqrt{2} \cdot 2 = \sqrt{4} = 2$$

$$\text{Ex 4: } \frac{2}{\sqrt{8}} \cdot \frac{\sqrt{8}}{\sqrt{8}} = \frac{2\sqrt{8}}{8} = \frac{\sqrt{8}}{4}$$

$$\text{Ex 5: } \frac{8\sqrt{5}}{3\sqrt{6}} \cdot \frac{\sqrt{6}}{\sqrt{6}} = \frac{8\sqrt{30}}{3 \cdot 6} = \frac{8\sqrt{30}}{18} = \boxed{\frac{4\sqrt{30}}{9}}$$