

ex $\sqrt{\frac{100}{25}}$

This can be simplified using either method, because 100 and 25 are already perfect squares and $100 \div 25 = 4$ which is also a perfect square.

So,

$$\sqrt{\frac{100}{25}} = \sqrt{4} = \boxed{2} \quad \text{or} \quad \frac{\sqrt{100}}{\sqrt{25}} = \frac{10}{5} = \boxed{2}$$

To SIMPLIFY using this rule:

$$\frac{\sqrt{50}}{\sqrt{2}} \rightarrow \sqrt{\frac{50}{2}} \rightarrow \boxed{\sqrt{25} = 5}$$

To COMBINE using this rule:

$$\frac{\sqrt{50}}{\sqrt{8}} \rightarrow \sqrt{\frac{50}{8}}$$