

Some radical expressions have factors in front of a radical such as,

$$22\sqrt{24}$$

Steps to Simplify a One Term Expression Containing a

1. Write original problem. $22\sqrt{24} = 22(2\sqrt{6})$
2. On the side, simplify the radical and then put the result back in problem in a (). [Note: Step is by the original problem.]
3. Multiply the number in front of () with the number inside of the () that is outside of the radical. $= 44\sqrt{6}$

$$\begin{aligned}\sqrt{24} &= \sqrt{4 \cdot 6} \\ &= \sqrt{4}\sqrt{6} \\ &= 2\sqrt{6}\end{aligned}$$