Multiply the following radicals: ☺ Remember to simplify

$\sqrt{2} \cdot \sqrt{3} =$

$\sqrt[3]{5} \cdot \sqrt[3]{5} =$

$5\sqrt{2} \cdot 3\sqrt{6} =$

$5\sqrt[3]{x^2} \cdot \sqrt[3]{x^6}$

Distributive Property:

$2(\sqrt{3} + \sqrt{5}) =$

$3(2\sqrt{7} + 5\sqrt{6}) =$

$\sqrt{3}(\sqrt{7} + 5\sqrt{6}) =$

$4\sqrt{5}(2\sqrt{3} - \sqrt{5}) =$

$4\sqrt{3}(3\sqrt{6} - 2\sqrt{5}) =$

$(\sqrt{3} + 5)(\sqrt{3} - 5) =$

$(\sqrt{6} + \sqrt{2})(\sqrt{6} - \sqrt{2}) =$

$(\sqrt{3} + 2)(4\sqrt{6} - 7\sqrt{5}) =$

What if the index numbers are different?

$$\sqrt{6} \cdot \sqrt[3]{7} =$$ VS $$\sqrt{6} \cdot \sqrt[3]{6} =$$

Divide the radicals:

$$\sqrt{\frac{36}{144}} =$$

$$\sqrt{\frac{3}{12}} =$$

$$\frac{\sqrt{6}}{\sqrt{3}} =$$

$$\frac{\sqrt{3}}{\sqrt{6}} =$$

$$\sqrt{\frac{3}{9}} =$$

$$\frac{8}{\sqrt{2}} =$$

$$\frac{\sqrt{40}}{\sqrt{75}} =$$

$$\sqrt[3]{\frac{x^4}{x}} =$$

$$\frac{\sqrt{9m}}{18} =$$

$$\frac{\sqrt{x^2}}{3\sqrt{5}} =$$

$$\frac{\sqrt[3]{5}}{\sqrt[3]{9}} =$$