

- Adding and subtracting - very similar to adding and subtracting like terms

Examples

$$3\sqrt{7} + 2\sqrt{7} = 5\sqrt{7}$$

\uparrow \uparrow
 SAME

Note -

always simplify radical terms before adding and subtracting

$$3\sqrt{7} + 2\sqrt{6}$$

\uparrow \uparrow
 Not the same - CAN'T add

- Multiplying/Dividing radicals - follow these rules

$$\sqrt{a} \cdot \sqrt{b} = \sqrt{ab}$$

Example

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

$$\sqrt{\frac{a}{b}} = \frac{\sqrt{a}}{\sqrt{b}}$$

Example

$$\sqrt{\frac{16}{23}} = \frac{\sqrt{16}}{\sqrt{23}} = \frac{4}{\sqrt{23}}$$