Simplify.

This is combining like terms after you simplify each of the radicals.

This is Distributive Property

$$5\sqrt{18} + 6\sqrt{12} - \sqrt{8} - 2\sqrt{27}$$

$$\sqrt{3} + \sqrt{3} + \sqrt{3} + \sqrt{3} - \sqrt{3}$$

$$(13) 7 + \sqrt{3}$$

Like Radicals must have:

- same index
- same radicand

Simplify.

$$\sqrt{2}(7 - \sqrt{8})$$
= $7\sqrt{2} - \sqrt{16}$
= $7\sqrt{2} - 4$

Simplify.

$$10\sqrt[3]{54} + \sqrt{8} - 2\sqrt[3]{16} + 5\sqrt{32}$$

$$2\sqrt[3]{2} + 2\sqrt{2} - 4\sqrt[3]{2} + 20\sqrt{2}$$

$$= 22\sqrt{2} + 26\sqrt[3]{2}$$

Simplify.

$$9\sqrt{5}(2-3\sqrt{5})$$

$$9\sqrt{5}(2-3\sqrt{5})$$

$$9\sqrt{5}(2-3\sqrt{5})$$

$$= 18\sqrt{5} - 27.5$$

$$= 18\sqrt{5} - 135$$

Simplify.

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

$$2.7.73.72$$

$$1476+10.3$$

$$=(4\sqrt{6}+30)$$

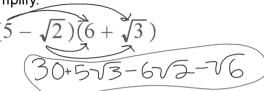
Expand.

$$(2-\sqrt{3})(4+10\sqrt{3})$$

$$8+20\sqrt{3}-4\sqrt{3}-10\sqrt{9}$$
 $-10\cdot 3$
 -30

Sec 7-3: Binomial Radical Expressions.

Simplify.



There are no like radicals, therefore, none of the terms can be combined.

Expand.

$$(2-\sqrt{27})(11+\sqrt{12})$$
 $(3-3\sqrt{3})(11+3\sqrt{3})$