

Addition & Subtraction of Unlike Radicals

Recall for addition: Combine Like Radicals

*** Simplify to make like radicals

1. $7\sqrt{5} - 2\sqrt{20}$

$$7\sqrt{5} - 2(\sqrt{4}\sqrt{5})$$

$$7\sqrt{5} - 2(2\sqrt{5})$$

$$7\sqrt{5} - 4\sqrt{5}$$

$$3\sqrt{5}$$

2. $4\sqrt{3} + 4\sqrt{12}$

$$4\sqrt{3} + 4(\sqrt{4}\sqrt{3})$$

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

$$4\sqrt{3} + 8\sqrt{3}$$

$$12\sqrt{3}$$

3. $5\sqrt{2} - \sqrt{32}$

$$5\sqrt{2} - (\sqrt{16}\sqrt{2})$$

$$5\sqrt{2} - 4\sqrt{2}$$

$$\sqrt{2}$$

4. $2\sqrt{24} - 3\sqrt{54}$

$$2(\sqrt{4}\sqrt{6}) - 3(\sqrt{9}\sqrt{6})$$

$$2(2\sqrt{6}) - 3(3\sqrt{6})$$

$$4\sqrt{6} - 9\sqrt{6}$$

$$-5\sqrt{6}$$

5. $6\sqrt{27} + 3\sqrt{48}$

$$6(\sqrt{9}\sqrt{3}) + 3(\sqrt{16}\sqrt{3})$$

$$6(3\sqrt{3}) + 3(4\sqrt{3})$$

$$18\sqrt{3} + 12\sqrt{3}$$

$$30\sqrt{3}$$

6. $6\sqrt{27} - \sqrt{75} + 3\sqrt{12}$

$$6\sqrt{9}\sqrt{3} - \sqrt{25}\sqrt{3} + 3\sqrt{4}\sqrt{3}$$

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

$$18\sqrt{3} - 5\sqrt{3} + 6\sqrt{3}$$

$$13\sqrt{3} + 6\sqrt{3}$$

$$19\sqrt{3}$$

HOMEWORK

Worksheet - Add & Subtract
Radicals - Day 2