



Adding and Subtracting Radicals With the Same Radicands

- Procedure:**
1. Combine the terms in front of the radicals.
 3. Leave the radicand the same.

Example:

Simplify $4\sqrt{5} - \sqrt{5}$.

$$4\sqrt{5} - \sqrt{5} = 3\sqrt{5} .$$

Simplify the following.

1. $2\sqrt{10} + 6\sqrt{10}$

2. $3\sqrt{6} + 5\sqrt{6}$

3. $10\sqrt{3} - 7\sqrt{3}$

4. $7\sqrt{5} + 2\sqrt{5} + 11\sqrt{5}$

5. $4\sqrt{21} - 8\sqrt{21}$

6. $-\sqrt{9} + \sqrt{9}$

7. $12\sqrt{33} - 6\sqrt{33} - 4\sqrt{33}$

8. $-2\sqrt{11} - 20\sqrt{11}$

9. $3\sqrt{15} + 19\sqrt{15}$

10. $10\sqrt{2} + \sqrt{7} - 3\sqrt{2} + 9\sqrt{7}$

11. $\sqrt{4} + \sqrt{4}$

12. $\sqrt{13} + 5\sqrt{13} - 2\sqrt{13}$