

Simplifying Radical Expressions

(Addition and Subtraction)



Level 1 - Simplify the radical expression by adding and subtracting

Level 2 - Simplify the radical expressions of higher order

Level 3 - Simplify the radical expressions involving variables

Answers:

Level 1

| | | |
|------------------|-----------------|-----------------|
| a) $-4\sqrt{5}$ | b) $6\sqrt{7}$ | c) $4\sqrt{3}$ |
| d) $-8\sqrt{2}$ | e) $5\sqrt{10}$ | f) 0 |
| g) $-26\sqrt{3}$ | h) $17\sqrt{6}$ | i) $6\sqrt{3}$ |
| j) $-4\sqrt{6}$ | k) $18\sqrt{2}$ | l) $-8\sqrt{5}$ |
| m) $5\sqrt{5}$ | n) $27\sqrt{6}$ | o) 0 |

Level 2

| | | |
|--------------------|--------------------|----------------|
| a) $-9\sqrt[3]{3}$ | b) $10\sqrt[4]{5}$ | c) $2\sqrt{3}$ |
| d) $-2\sqrt[3]{2}$ | e) 10 | f) 0 |
| g) 8 | h) 1 | i) -3 |
| j) 4 | k) -14 | l) 5 |

Level 3

| | | |
|------------------|---------------------|------------------------|
| a) $5x$ | b) $3ab$ | c) $5m^2n$ |
| d) $3a\sqrt{a}$ | e) $5xy\sqrt{y}$ | f) $-7pq$ |
| g) $-10\sqrt{x}$ | h) 0 | i) $13ab\sqrt[3]{b^2}$ |
| j) 0 | k) $3x\sqrt[4]{xy}$ | l) $x^2\sqrt{y}$ |