



Math worksheet on 'Radicals - Addition Under Squared Radical Times Integer To Radical (Level 1)'. Part of a broader unit on 'Radicals - Simplifying Intro'

Learn online: app.mobius.academy/math/units/radicals_simplifying_intro/

2

Simplify the radical.

$$2\sqrt{2 + 25}$$

- | | | | | | |
|-------------|-------------|-------------|-------------|-------------|---|
| a | b | c | d | e | f |
| $6\sqrt{3}$ | $9\sqrt{4}$ | $4\sqrt{3}$ | $2\sqrt{6}$ | $7\sqrt{6}$ | 4 |

1

Simplify the radical.

$$3\sqrt{9 + 23}$$

- | | | | | | |
|----|--------------|--------------|--------------|--------------|----|
| a | b | c | d | e | f |
| 15 | $14\sqrt{3}$ | $10\sqrt{2}$ | $14\sqrt{4}$ | $12\sqrt{2}$ | 12 |

3

Simplify the radical.

$$4\sqrt{138 - 26}$$

- | | | | | | |
|--------------|--------------|--------------|--------------|--------------|--------------|
| a | b | c | d | e | f |
| $17\sqrt{6}$ | $16\sqrt{7}$ | $12\sqrt{7}$ | $13\sqrt{7}$ | $17\sqrt{8}$ | $12\sqrt{6}$ |

4

Simplify the radical.

$$4\sqrt{94 + 31}$$

- | | | | | | |
|--------------|--------------|--------------|--------------|--------------|--------------|
| a | b | c | d | e | f |
| $20\sqrt{3}$ | $21\sqrt{5}$ | $20\sqrt{5}$ | $20\sqrt{4}$ | $18\sqrt{7}$ | $16\sqrt{4}$ |

5

Simplify the radical.

$$5\sqrt{58 + 50}$$

- | | | | | | |
|--------------|--------------|--------------|----|--------------|--------------|
| a | b | c | d | e | f |
| $28\sqrt{5}$ | $33\sqrt{6}$ | $30\sqrt{6}$ | 26 | $30\sqrt{3}$ | $26\sqrt{4}$ |

6

Simplify the radical.

$$5\sqrt{41 + 135}$$

- | | | | | | |
|---------------|---------------|--------------|--------------|--------------|---------------|
| a | b | c | d | e | f |
| $20\sqrt{11}$ | $22\sqrt{14}$ | $21\sqrt{7}$ | $22\sqrt{9}$ | $18\sqrt{8}$ | $21\sqrt{11}$ |

7

Simplify the radical.

$$3\sqrt{70 - 7}$$

- | | | | | | |
|--------------|--------------|--------------|-------------|-------------|-------------|
| a | b | c | d | e | f |
| $12\sqrt{8}$ | $11\sqrt{6}$ | $12\sqrt{3}$ | $7\sqrt{9}$ | $9\sqrt{7}$ | $5\sqrt{8}$ |