



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

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

1 Simplify the radical.

$$1 + \sqrt{189 - 13}$$

a	$1 + 7\sqrt{14}$	b	$1 + 7\sqrt{10}$
c	$1 + 4\sqrt{7}$	d	$1 + 4\sqrt{11}$
e	$1 + 7\sqrt{8}$	f	$1 + 2\sqrt{12}$

2 Simplify the radical.

$$1 + \sqrt{21 + 51}$$

a	b	c	d	e	f
$1 + 5\sqrt{3}$	$1 + 8$	$1 + 6\sqrt{5}$	$1 + 5$	$1 + 6$	$1 + 6\sqrt{2}$

3 Simplify the radical.

$$2 + \sqrt{105 + 20}$$

a	b	c	d	e	f
$2 + 8\sqrt{7}$	$2 + 6\sqrt{8}$	$2 + 7\sqrt{7}$	$2 + 8\sqrt{5}$	$2 + 5\sqrt{5}$	$2 + 2\sqrt{8}$

4 Simplify the radical.

$$3 + \sqrt{317 - 65}$$

a	b	c	d	e	f
$3 + 6\sqrt{7}$	$3 + 6\sqrt{6}$	$3 + 4\sqrt{4}$	$3 + 8\sqrt{3}$	$3 + 7\sqrt{7}$	$3 + 3\sqrt{9}$

5 Simplify the radical.

$$2 + \sqrt{21 - 1}$$

a	b	c	d	e	f
$2 + \sqrt{7}$	$2 + \sqrt{4}$	$2 + \sqrt{5}$	$2 + 4\sqrt{8}$	$2 + \sqrt{8}$	$2 + 2\sqrt{5}$

6 Simplify the radical.

$$1 + \sqrt{29 - 2}$$

a	b	c	d	e	f
$1 + 6$	$1 + \sqrt{2}$	$1 + \sqrt{5}$	$1 + 2\sqrt{3}$	$1 + \sqrt{6}$	$1 + 3\sqrt{3}$

7 Simplify the radical.

$$1 + \sqrt{13 - 1}$$

a	b	c	d	e	f
$1 + 3$	$1 + 2\sqrt{3}$	$1 + \sqrt{2}$	$1 + 2\sqrt{5}$	$1 + 4\sqrt{2}$	$1 + \sqrt{3}$