



Math worksheet on 'Radicals - Addition Under Squared Radical Plus Integer to Radical (Level 2)'. Part of a broader unit on 'Radicals - Simplifying Practice'

Learn online: [app.mobius.academy/math/units/radicals\\_simplifying\\_practice/](http://app.mobius.academy/math/units/radicals_simplifying_practice/)

1 Simplify the radical.

$$2 + \sqrt{56 + 52}$$

a	b	c	d	e	f
$2 + 7\sqrt{6}$	$2 + 7$	$2 + 8\sqrt{6}$	$2 + 3$	$2 + 2$	$2 + 6\sqrt{3}$

2 Simplify the radical.

$$2 + \sqrt{143 + 396}$$

a	$2 + 4\sqrt{13}$	b	$2 + 9\sqrt{8}$
c	$2 + 7\sqrt{11}$	d	$2 + 6\sqrt{9}$
e	$2 + 3\sqrt{8}$	f	$2 + 3\sqrt{14}$

3 Simplify the radical.

$$1 + \sqrt{315 - 72}$$

a	$1 + 9\sqrt{3}$	b	$1 + 6\sqrt{5}$
c	$1 + 5$	d	$1 + 10\sqrt{2}$
e	$1 + 11\sqrt{2}$	f	$1 + 6$

4 Simplify the radical.

$$3 + \sqrt{416 - 73}$$

a	$3 + 10\sqrt{9}$	b	$3 + 7\sqrt{9}$
c	$3 + 5\sqrt{6}$	d	$3 + 7\sqrt{10}$
e	$3 + 5\sqrt{5}$	f	$3 + 7\sqrt{7}$

5 Simplify the radical.

$$4 + \sqrt{6 + 12}$$

a	b	c	d	e	f
$4 + 6\sqrt{5}$	$4 + 4\sqrt{5}$	$4 + 4$	$4 + 3$	$4 + 3\sqrt{2}$	$4 + 5\sqrt{2}$

6 Simplify the radical.

$$2 + \sqrt{264 - 21}$$

a	$2 + 9\sqrt{3}$	b	$2 + 10\sqrt{5}$
c	$2 + 6$	d	$2 + 11\sqrt{5}$
e	$2 + 11\sqrt{4}$	f	$2 + 5\sqrt{2}$

7 Simplify the radical.

$$1 + \sqrt{25 + 47}$$

a	b	c	d	e	f
$1 + 5$	$1 + 3$	$1 + 2\sqrt{3}$	$1 + 9\sqrt{2}$	$1 + 6$	$1 + 6\sqrt{2}$