



Math worksheet on 'Complex Numbers - Rewriting Roots (Level 2)'. Part of a broader unit on 'Complex Numbers'

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1 Rewrite the root as a complex number and simplify all radicals

$$\sqrt{-112}$$

a	b	c
$4i\sqrt{7}$	$i\sqrt{9}$	$i\sqrt{10}$

d	e	f
$7i\sqrt{8}$	$i\sqrt{5}$	$3i\sqrt{3}$

2 Rewrite the root as a complex number and simplify all radicals

$$\sqrt{-32}$$

a	b	c
$3i\sqrt{4}$	$2i$	i

d	e	f
$6i$	$4i\sqrt{2}$	$5i\sqrt{5}$

3 Rewrite the root as a complex number and simplify all radicals

$$\sqrt{-8}$$

a	b	c
$5i\sqrt{3}$	$2i\sqrt{2}$	i

d	e	f
$2i$	$5i$	$i\sqrt{4}$

4 Rewrite the root as a complex number and simplify all radicals

$$\sqrt{-28}$$

a	b	c
$i\sqrt{8}$	$3i\sqrt{8}$	$2i\sqrt{7}$

d	e	f
$5i\sqrt{6}$	$3i\sqrt{6}$	$3i\sqrt{9}$

5 Rewrite the root as a complex number and simplify all radicals

$$\sqrt{-20}$$

a	b	c
$5i\sqrt{7}$	$2i\sqrt{5}$	$i\sqrt{7}$

d	e	f
i	$3i$	$5i\sqrt{2}$

6 Rewrite the root as a complex number and simplify all radicals

$$\sqrt{-50}$$

a	b	c
$i\sqrt{5}$	$2i\sqrt{3}$	$5i\sqrt{2}$

d	e	f
$3i$	$7i$	$i\sqrt{3}$

7 Rewrite the root as a complex number and simplify all radicals

$$\sqrt{-44}$$

a	b	c
$i\sqrt{7}$	$i\sqrt{14}$	$i\sqrt{12}$

d	e	f
$2i\sqrt{11}$	$2i\sqrt{12}$	$5i\sqrt{11}$