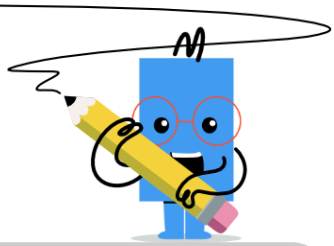
Name

Complex Numbers - Rewriting Roots



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

$$\sqrt{-63rz^4}$$

A	B	C	D	E	F
$zi\sqrt{4r}$	$2z^3i\sqrt{9r}$	$zi\sqrt{9r}$	$z^3i\sqrt{9r}$	$zi\sqrt{5r^2}$	$3z^2i\sqrt{7r}$

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

$$\sqrt{-63y^2x}$$

A	$3yi\sqrt{7x}$	B	$2yi\sqrt{9x}$
C	$3yi\sqrt{9x}$	D	$yi\sqrt{8x}$
E	$y^2i\sqrt{10x}$	F	$5yi\sqrt{7x^2}$

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

$$\sqrt{-18ym^3}$$

A	$3mi\sqrt{ym}$	B	$mi\sqrt{ym}$
C	$3mi\sqrt{2ym}$	D	$m^3i\sqrt{2y^2m}$
E	$4mi\sqrt{ym}$	F	$2m^2i\sqrt{y^2m}$

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

$$\sqrt{-125b^2c^3}$$

A	$8bci\sqrt{2c^3}$	B	$bci\sqrt{4c}$
C	$5bci\sqrt{5c}$	D	$2bci\sqrt{5c}$
E	$4b^3ci\sqrt{8c^3}$	F	$3bc^3i\sqrt{2c^2}$

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

$$\sqrt{-27yz^4}$$

A	$4z^3i\sqrt{y}$	B	$3z^2i\sqrt{3y}$
C	$4z^3i\sqrt{2y}$	D	$z^2i\sqrt{4y^2}$
E	$4z^3i\sqrt{y^3}$	F	$6z^2i\sqrt{y^2}$

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

$$\sqrt{-112cn^4}$$

A	$4n^2i\sqrt{7c}$	B	$7ni\sqrt{8c}$
C	$2ni\sqrt{3c}$	D	$7n^3i\sqrt{8c}$
E	$2n^2i\sqrt{3c}$	F	$6n^4i\sqrt{10c}$

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

$$\sqrt{-20r^3p^4}$$

A	$rpi\sqrt{5r^2}$	B	$r^3pi\sqrt{4r^2}$
C	$4rp^3i\sqrt{5r}$	D	$r^3p^3i\sqrt{4r}$
E	$2rp^2i\sqrt{5r}$	F	$2r^3pi\sqrt{r}$

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

$$\sqrt{-63bp^3}$$

A	$3pi\sqrt{7bp}$	B	$p^2i\sqrt{10b^3p^2}$
C	$2p^2i\sqrt{8bp^3}$	D	$pi\sqrt{7bp^3}$
E	$2pi\sqrt{4b^2p}$	F	$pi\sqrt{7b^2p}$