

Complex Numbers

Name _____

$$a + bi$$

↑
Real Part

↙
Imaginary Part

Complex Number Maze

Complete the maze by simplifying each expression, shade the squares that contain imaginary numbers, and following the path of complex numbers.

$(1+i)(1-i)$	$(2+3i) + (-4+5i)$	$(5-6i)(6-2i)$	$2i(3i^2)$	$3i(2i)$	Start Here $\sqrt{-4}$
$\sqrt{5-4}$	$-\sqrt{-49}$	$(3+2i) - (4+2i)$	$\sqrt{-36}$	$\sqrt{-25} + 3$	$2(3+2i)$
$\sqrt{\frac{81}{25}}$	$(5+14i) - (10-2i)$	$(5+4i) - (-1-2i)$	$3 + \sqrt{5}$	$-\sqrt{64}$	$2i - (3+2i)$
$(2+3i)(2-3i)$	$5i - \sqrt{-25}$	$(3+4i)(3+4i)$	$4 - \sqrt{-25}$	$-\sqrt{-4}$	$3i(2+3i)$
$(6+2i) + (1-2i)$	i^2	$\sqrt{125}$	$4i^2$	$(1-3i)(1+3i)$	$(1+2i)(-1-2i)$
$\sqrt{-225}$	$(5+4i) - (-1-2i)$	$(1+2i) + (2-3i)$	$(2i^2)(-3i^2)$	$2(3+4i)$	$(6+2i)(3i)$
$-\sqrt{-1}$	$-3i(-5i)$	$5i^2(2+i)$	$(2-3i)-3i$	$3-(2-i)$	$-\sqrt{64}$
End Here					

Complex Numbers

Name _____








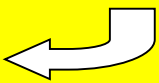









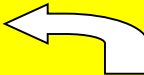




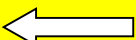

$$a + bi$$

↑
Real Part

↙
Imaginary Part

KEY Complex Number Maze **KEY**

Complete the maze by simplifying each expression, shade the squares that contain imaginary numbers, and following the path of complex numbers.

$(1+i)(1-i)$	$(2+3i) + (-4+5i)$ 	$(5-6i)(6-2i)$ 	$2i(3i^2)$ 	$3i(2i)$	Start Here $\sqrt{-4}$ 
$\sqrt{5-4}$	$-\sqrt{-49}$ 	$(3+2i) - (4+2i)$	$\sqrt{-36}$ 	$\sqrt{-25} + 3$ 	$2(3+2i)$ 
$\sqrt{\frac{81}{25}}$	$(5+14i) - (10-2i)$ 	$(5+4i) - (-1-2i)$ 	$3 + \sqrt{5}$	$-\sqrt{64}$	$2i - (3+2i)$
$(2+3i)(2-3i)$	$5i - \sqrt{-25}$	$(3+4i)(3+4i)$ 	$4 - \sqrt{-25}$ 	$-\sqrt{-4}$ 	$3i(2+3i)$ 
$(6+2i) + (1-2i)$	i^2	$\sqrt{125}$	$4i^2$	$(1-3i)(1+3i)$	$(1+2i)(-1-2i)$ 
$\sqrt{-225}$ 	$(5+4i) - (-1-2i)$ 	$(1+2i) + (2-3i)$ 	$(2i^2)(-3i^2)$	$2(3+4i)$ 	$(6+2i)(3i)$ 
$-\sqrt{-1}$  End Here	$-3i(-5i)$	$5i^2(2+i)$ 	$(2-3i)-3i$ 	$3 - (2-i)$ 	$-\sqrt{64}$

Complex Numbers

$$a + bi$$

a is the *Real Part* and *bi* is the *Imaginary Part*.

$$\sqrt{-1} = i$$

$$i^2 = -1$$

$$i^3 = -i$$

$$i^4 = 1$$