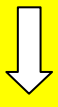



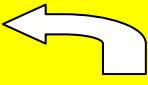


## Complex Number Maze

Complete the maze by simplifying each expression. Simplify each expression and shade in the squares with imaginary numbers. You will have a path leading from the start square to the end square.

$(1+i)(1-i)$	$(2+3i)+(-4+5i)$	$(5-6i)(6-2i)$	$2i(3i^2)$	$3i(2i)$	Start Here $\sqrt{-4}$
$\sqrt{5-4}$	$-\sqrt{-49}$	$(3+2i)-(4+2i)$	$\sqrt{-36}$	$\sqrt{-25}+3$	$2(3+2i)$
$\sqrt{\frac{81}{25}}$	$(5+14i)-(10-2i)$	$(5+4i)-(-1-2i)$	$3+\sqrt{5}$	$-\sqrt{64}$	$2i-(3+2i)$
$(2+3i)(2-3i)$	$5i-\sqrt{-25}$	$(3+4i)(4-3i)$	$4-\sqrt{-25}$	$-\sqrt{-4}$	$3i(2+3i)$
$(6+2i)+(1-2i)$	$i^2$	$\sqrt{125}$	$4i^2$	$(1-3i)(1+3i)$	$(1+2i)(-1-2i)$
$\sqrt{-225}$	$(5+4i)-(1+2i)$	$(1+2i)+(2-3i)$	$(2i^2)(-3i^2)$	$2(3+4i)$	$(6+2i)(3i)$
$-\sqrt{-1}$  End Here	$-3i(-5i)$	$5i^2(2+i)$	$(2-3i)-3i$	$3-(2-i)$	$-\sqrt{625}$

KEY ... Complex Number Maze ... KEY

$(1+i)(1-i)$ $=2$	$(2+3i) + (-4+5i)$ $= -2 + 8i$ 	$(5-6i)(6-2i)$ $=18-46i$ 	$2i(3i^2)$ $= -6i$ 	$3i(2i)$ $= -6$	<p>Start Here</p> $\sqrt{-4}$ $= 2i$ 
$\sqrt{5-4}$ $=1$	$-\sqrt{-49}$ $= -7i$ 	$(3+2i) - (4+2i)$ $= -1$	$\sqrt{-36}$ $= 6i$ 	$\sqrt{-25} + 3$ $= 3+5i$ 	$2(3+2i)$ $= 6+4i$ 
$\sqrt{\frac{81}{25}} = \frac{9}{5}$	$(5+14i) - (10-2i)$ $= -5 + 16i$ 	$(5+4i) - (-1-2i)$ $= 6+6i$ 	$3 + \sqrt{5}$	$-\sqrt{64}$ $= -8$	$2i - (3+2i)$ $= 3$
$(2+3i)(2-3i)$ $=13$	$5i - \sqrt{-25}$ $= 0$	$(3+4i)(4-3i)$ $= 24 - 7i$ 	$4 - \sqrt{-25}$ $= 4-5i$ 	$-\sqrt{-4}$ $= -2i$ 	$3i(2+3i)$ $= -9 + 6i$ 
$(6+2i) + (1-2i)$ $= 7$	$i^2$ $= -1$	$\sqrt{125}$ $= 5\sqrt{5}$	$4i^2$ $= -4$	$(1-3i)(1+3i)$ $= 10$	$(1+2i)(-1-2i)$ $= -6 + 4i$ 
$\sqrt{-225} =$ $-5i$ 	$(5+4i) - (1+2i)$ $= 4 + 2i$ 	$(1+2i) + (2-3i)$ $= 3-i$ 	$(2i^2)(-3i^2)$ $= -6$	$2(3+4i)$ $= -6 + 8i$ 	$(6+2i)(3i)$ $= -6 + 18i$ 
$-\sqrt{-1}$ $= -i$  <p>End Here</p>	$-3i(-5i)$ $= -15$	$5i^2(2+i)$ $= -10 - 5i$ 	$(2-3i)-3i$ $= 2-6i$ 	$3 - (2-i)$ $= 1+i$ 	$-\sqrt{625}$ $= -25$