COMPLEX NUMBERS

Engage

Not Like the Others

1)	2)

Explore

Simplify and Justify

3) Simplify: $\sqrt{16}$	4) Try to simplify: $\sqrt{-16}$
5) Simplify: $\sqrt{20}$	6) Try again to simplify: $\sqrt{-16}$

I Notice, I Wonder

I Notice…	I Wonder…

Explain

Practice

7) $\sqrt{-48} =$	**8)** $-\sqrt{-36} =$

Extend

Simplify and Justify

$i^1 = \sqrt{-1} = i$	$i^5 =$	$i^9 =$
$i^2 = \left(\sqrt{-1}\right)^2 = -1$	$i^6 =$	$i^{10} =$
$i^3 =$	$i^7 =$	$i^{11} =$
$i^4 =$	$i^8 =$	$i^{12} =$

I Notice, I Wonder

I Notice…	I Wonder…

Practice

9) $i^{100} =$
10) $i^{45} =$
11) $i^{67} =$