

# Complex Numbers



The set of all real and  
imaginary numbers

# Complex Number

## (Examples)

$$a \pm bi$$

$a$  and  $b$  are real numbers and  $i = \sqrt{-1}$

A complex number consists of both real ( $a$ ) and imaginary ( $bi$ ) but either part can be 0

Case	Examples
$a = 0$	$-i, 0.01i, \frac{2i}{5}$
$b = 0$	$\sqrt{5}, 4, -12.8$
$a \neq 0, b \neq 0$	$39 - 6i, -2 + \pi i$