

## Parent guide

- Begin by introducing the concept of imaginary numbers and the imaginary unit.
- Complex numbers are a type of number that includes both real numbers and imaginary numbers. While real numbers are what we commonly use in everyday life (like 1, 2, 3, etc.), imaginary numbers involve the square root of -1, often denoted as  $i$ .
- Imaginary numbers are written as  $bi$ , where  $b$  is a real number and  $i$  is the imaginary unit.  
For example,  $2i$  is an imaginary number.
- Explain that a complex number is a combination of a real part and an imaginary part.
- Show how complex numbers are represented in the form  $(a + bi)$ .
- Introduce the Argand diagram, a graphical representation of complex numbers where the real part is plotted on the horizontal axis and the imaginary part on the vertical axis.
- Basic Operations Teach addition, subtraction, multiplication, and division of complex numbers.
- Define the conjugate of a complex number and explain its properties.
- Introduce the modulus (absolute value) and argument (angle) of a complex number in the Argand diagram.