Name

# Number Types (Complex) - Set Builder Letter to Description - Real, Imaginary, and Complex Numbers

**1** Select the description that matches this symbol

$\mathbb{Q}$

A. A number that has either/both a real and an imaginary part (e.g., 6, -7i, 3 + 4i).
B. Any number that can be expressed as a fraction of two integers (e.g., 1/2, -3/4, 5).
C. A number that includes a real part and an imaginary part (e.g., 3 + 4i).
D. A non-negative integer (0, 1, 2, 3, ...).

**2** Select the description that matches this symbol

$i$

A. Any number that can be expressed as a fraction of two integers (e.g., 1/2, -3/4, 5).
B. A non-negative integer (0, 1, 2, 3, ...).
C. Any number that can be found on the number line, including both rational and irrational numbers.
D. A number that includes a real part and an imaginary part (e.g., 3 + 4i).

**3** Select the description that matches this symbol

$\mathbb{N}$

A. A number that can be expressed as a real number multiplied by the imaginary unit i (e.g., 2.5i).
B. A number that cannot be expressed as a simple fraction (e.g., √2, π).
C. A positive integer (1, 2, 3, ...).
D. A number that has either/both a real and an imaginary part (e.g., 6, -7i, 3 + 4i).

**4** Select the description that matches this symbol

$\mathbb{W}$

A. A number that includes a real part and an imaginary part (e.g., 3 + 4i).
B. Any number that can be expressed as a fraction of two integers (e.g., 1/2, -3/4, 5).
C. A number that can be expressed as a real number multiplied by the imaginary unit i (e.g., 2.5i).
D. A non-negative integer (0, 1, 2, 3, ...).

**5** Select the description that matches this symbol

$\mathbb{Q}'$

A. A number that can be expressed as a real number multiplied by the imaginary unit i (e.g., 2.5i).
B. A number that has either/both a real and an imaginary part (e.g., 6, -7i, 3 + 4i).
C. A number that includes a real part and an imaginary part (e.g., 3 + 4i).
D. A number that cannot be expressed as a simple fraction (e.g., √2, π).

**6** Select the description that matches this symbol

$\mathbb{C}$

A. A number that has either/both a real and an imaginary part (e.g., 6, -7i, 3 + 4i).
B. A number that can be expressed as a real number multiplied by the imaginary unit i (e.g., 2.5i).
C. A positive integer (1, 2, 3, ...).
D. A number that cannot be expressed as a simple fraction (e.g., √2, π).

**7** Select the description that matches this symbol

$\mathbb{R}$

A. Any number that can be found on the number line, including both rational and irrational numbers.
B. A non-negative integer (0, 1, 2, 3, ...).
C. A number that has either/both a real and an imaginary part (e.g., 6, -7i, 3 + 4i).
D. Any number that can be expressed as a fraction of two integers (e.g., 1/2, -3/4, 5).