Number Types (Complex) - Classification to Description - Real, Imaginary, and Complex Numbers

1

Select the description that matches a natural number

Natural Number

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

2

Select the description that matches a complex number

Complex Number

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 found on the number line, including both rational and irrational
C A number that can be expressed as a real number multiplied by the imaginary unit	D A non-negative integer (0, 1, 2, 3, ...).

3

Select the description that matches a whole number

Whole Number

A A number that cannot be expressed as a simple fraction (e.g., √2, π).	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 A number that can be expressed as a real number multiplied by the imaginary unit

4

Select the description that matches an imaginary number

Imaginary Number

A A number that cannot be expressed as a simple fraction (e.g., √2, π).	B A non-negative integer (0, 1, 2, 3, ...).
C A number that can be expressed as a real number multiplied by the imaginary unit	D A number that includes a real part and an imaginary part (e.g., 3 + 4i).

5

Select the description that matches an irrational number

Irrational Number

A A number that includes a real part and an imaginary part (e.g., 3 + 4i)	B A positive integer (1, 2, 3, ...).
C Any number that can be expressed as a fraction of two integers (e.g., 1/2, -3/4, 5).	D A number that cannot be expressed as a simple fraction (e.g., √2, π).

6

Select the description that matches a real number

Real Number

A A non-negative integer (0, 1, 2, 3, ...).
B Any number that can be found on the number line, including both rational and irrational numbers
C A number that includes a real part and an imaginary part (e.g., 3 + 4i).
D A number that can be expressed as a real number multiplied by the imaginary unit i (e.g., 2.5i)

7

Pure Imaginary Number

Select the description that matches a pure imaginary number

A A number that cannot be expressed as a simple fraction (e.g., √2, π).
B A number that can be expressed as a real number multiplied by the imaginary unit
C Any number that can be expressed as a fraction of two integers (e.g., 1/2, -3/4, 5)
D A non-negative integer (0, 1, 2, 3, ...).

8

Select the description that matches a rational number

Rational Number

A A positive integer (1, 2, 3, ...).	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	D Any number that can be found on the number line, including both rational and irrational