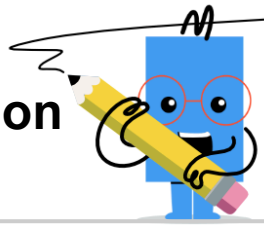
Name



Number Types (Complex) - Classification to Set Builder Definition - Real, Imaginary, and Complex Numbers

1 Select the set that means a complex number

Complex Number

A $\{x \mid x \in \mathbb{W}\}$

B $\{a+bi \mid a,b \in \mathbb{R}\}$

C $\{a+bi \mid a,b \in \mathbb{R}, b\neq 0\}$

D $\{x \mid x \in \mathbb{Q}\}$

2 Select the set that means a rational number

Rational Number

A $\{x \mid x \in \mathbb{N}\}$

B $\{bi \mid b \in \mathbb{R}, b\neq 0\}$

C $\{x \mid x \in \mathbb{Q}\}$

D $\{x \mid x \in \mathbb{R}\}$

3 Select the set that means an imaginary number

Imaginary Number

A $\{x \mid x \in \mathbb{W}\}$

B $\{x \mid x \in \mathbb{R}\}$

C $\{x \mid x \in \mathbb{Q}\}$

D $\{a+bi \mid a,b \in \mathbb{R}, b\neq 0\}$

4 Select the set that means an irrational number

Irrational Number

A $\{x \mid x \in \mathbb{W}\}$

B $\{x \mid x \in \mathbb{R}, x \notin \mathbb{Q}\}$

C $\{a+bi \mid a,b \in \mathbb{R}, b\neq 0\}$

D $\{bi \mid b \in \mathbb{R}, b\neq 0\}$

5 Select the set that means a natural number

Natural Number

A $\{x \mid x \in \mathbb{Q}\}$

B $\{x \mid x \in \mathbb{R}, x \notin \mathbb{Q}\}$

C $\{x \mid x \in \mathbb{N}\}$

D $\{a+bi \mid a,b \in \mathbb{R}\}$

6 Select the set that means a real number

Real Number

A $\{bi \mid b \in \mathbb{R}, b\neq 0\}$

B $\{x \mid x \in \mathbb{N}\}$

C $\{x \mid x \in \mathbb{R}\}$

D $\{a+bi \mid a,b \in \mathbb{R}, b\neq 0\}$

7 Pure Imaginary Number

Select the set that means a pure imaginary number

A $\{x \mid x \in \mathbb{R}, x \notin \mathbb{Q}\}$

B $\{a+bi \mid a,b \in \mathbb{R}\}$

C $\{a+bi \mid a,b \in \mathbb{R}, b\neq 0\}$

D $\{bi \mid b \in \mathbb{R}, b\neq 0\}$

8 Select the set that means a whole number

Whole Number

A $\{x \mid x \in \mathbb{R}\}$

B $\{x \mid x \in \mathbb{R}, x \notin \mathbb{Q}\}$

C $\{x \mid x \in \mathbb{W}\}$

D $\{bi \mid b \in \mathbb{R}, b\neq 0\}$