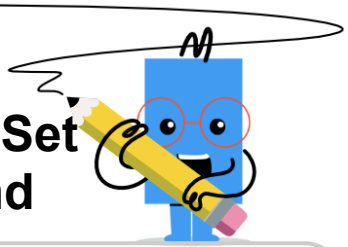
Name

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



1 Select the narrowest set definition that matches this number type

$\sqrt{47}$

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

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

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

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

2 Select the narrowest set definition that matches this number type

$\sqrt{29}$

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

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

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

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

3 Select the narrowest set definition that matches this number type

$$\frac{37i}{5}$$

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

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

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

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

4 Select the narrowest set definition that matches this number type

20

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

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

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

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

5 Select the narrowest set definition that matches this number type

$41i$

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

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

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

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

6 Select the narrowest set definition that matches this number type

$1+29i$

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

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

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

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

7 Select the narrowest set definition that matches this number type

$3i$

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

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

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

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

8 Select the narrowest set definition that matches this number type

$$1+\frac{19i}{5}$$

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

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

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

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