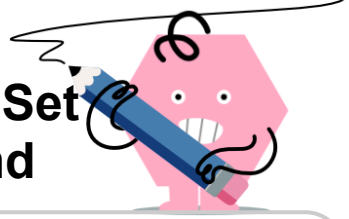
Name

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



1 Select the narrowest set definition that matches this number type

$$\frac{\sqrt{7}i}{2}$$

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

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

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

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

2 Select the narrowest set definition that matches this number type

$$\frac{0}{7}$$

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

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

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

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

3 Select the narrowest set definition that matches this number type

$$\sqrt{\frac{75}{3}}$$

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

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

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

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

4 Select the narrowest set definition that matches this number type

$$\sqrt{47i}$$

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

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

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

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

5 Select the narrowest set definition that matches this number type

$$-1.\overline{3}$$

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

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

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

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

6 Select the narrowest set definition that matches this number type

$$0.\overline{4}$$

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

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

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

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

7 Select the narrowest set definition that matches this number type

$$\sqrt{13i}$$

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

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

$$0.\overline{9}$$

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

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

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

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