



Number Types (Real) - Number to Set Builder Definition - Whole, Natural, Integer, Rational, Irrational Numbers

1 Select the narrowest set definition that matches this number type

$$-3.\overline{7}$$

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

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

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

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

Select the narrowest set definition that matches this number type

$$\frac{20}{4}$$

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

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

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

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

3 Select the narrowest set definition that matches this number type

$$\frac{0}{6}$$

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

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

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

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

4 Select the narrowest set definition that matches this number type

$$0.\overline{9}$$

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

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

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

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

5 Select the narrowest set definition that matches this number type

$$\frac{0}{4}$$

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

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

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

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

6 Select the narrowest set definition that matches this number type

$$\frac{\sqrt{61}}{8}$$

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

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

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

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

7 Select the narrowest set definition that matches this number type

$$0.\overline{14}$$

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

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

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

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

8 Select the narrowest set definition that matches this number type

$$\frac{0}{12}$$

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

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

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

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