



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

$$\frac{\sqrt{83}}{1}$$

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

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

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

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

Select the narrowest set definition that matches this number type

$$\frac{\sqrt{47}}{8}$$

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

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

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

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

3 Select the narrowest set definition that matches this number type

$$\frac{15}{5}$$

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

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

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

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

4 Select the narrowest set definition that matches this number type

$$\frac{25}{49}$$

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

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

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

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

5 Select the narrowest set definition that matches this number type

$$\frac{\sqrt{73}}{9}$$

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

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

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

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

6 Select the narrowest set definition that matches this number type

$$\frac{21}{7}$$

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

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

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

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

7 Select the narrowest set definition that matches this number type

$$0.\overline{6}$$

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

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

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

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

8 Select the narrowest set definition that matches this number type

$$\sqrt{\frac{18}{2}}$$

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

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

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

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