



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

1 Select the description that matches this set definition $\{x \mid x \in \mathbb{Q}\}$

A A number that cannot be expressed as a simple fraction (e.g. $\sqrt{2}$, π)

B A positive integer (1, 2, 3, ...).

C Any number that can be found on the number line, including both rational and irrational

D Any number that can be expressed as a fraction of two integers (e.g. $1/2$, $-3/4$, 5)

Select the description that matches this set definition $\{x \mid x \in \mathbb{N}\}$

A Any number that can be found on the number line, including both rational and irrational

B A positive integer (1, 2, 3, ...).

C A number that cannot be expressed as a simple fraction (e.g. $\sqrt{2}$, π)

D Any number that can be expressed as a fraction of two integers (e.g. $1/2$, $-3/4$, 5)

3 Select the description that matches this set definition

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

A A number that cannot be expressed as a simple fraction

B A positive integer (1, 2, 3, ...).

C Any number that can be expressed as a fraction of two

D A non-negative integer (0, 1, 2, 3, ...)

4 Select the description that matches this set definition $\{x \mid x \in \mathbb{W}\}$

A A number that cannot be expressed as a simple fraction (e.g. $\sqrt{2}$, π)

B A non-negative integer (0, 1, 2, 3, ...).

C Any number that can be expressed as a fraction of two integers (e.g. $1/2$, $-3/4$, 5)

D Any number that can be found on the number line, including both rational and irrational

5 Select the description that matches this set definition $\{x \mid x \in \mathbb{R}\}$

A A non-negative integer (0, 1, 2, 3, ...).

B A number that cannot be expressed as a simple fraction (e.g. $\sqrt{2}$, π)

C Any number that can be found on the number line, including both rational and irrational

D Any number that can be expressed as a fraction of two integers (e.g. $1/2$, $-3/4$, 5)