



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

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

- | | |
|---|--|
| 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 non-negative integer (0, 1, 2, 3, ...). | D Any number that can be expressed as a fraction of two integers (e.g. 1/2, -3/4, 5) |

2 Select the description that matches this set definition

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

- | | |
|--|---|
| A A positive integer (1, 2, 3, ...). | B A number that cannot be expressed as a simple fraction |
| C Any number that can be expressed as a fraction of two integers | D Any number that can be found on the number line, including both rational and irrational |

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

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

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

- | | |
|---|--|
| 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 non-negative integer (0, 1, 2, 3, ...). | D Any number that can be expressed as a fraction of two integers (e.g. 1/2, -3/4, 5) |

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

- | | |
|--|---|
| 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 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 |