

Unit 1: Number Sense  
- Lesson 1: Number Systems -

Venn Diagram

Real Numbers  
( $\mathbb{R}$ )

Irrationals ( $\mathbb{Q}$ )  
- cannot be expressed as fractions  
- decimals don't terminate or repeat  
 $\pi, e, \sqrt{2}, 0.13133133313333...$

Rationals ( $\mathbb{Q}$ )  
- can be expressed as a fraction  
- decimals terminate or repeat  
 $\frac{1}{2}, 0.5, 3.5555...$

Integers ( $\mathbb{I}$ )  
..., -3, -2, -1, 0, 1, 2, 3, ...

Whole Numbers ( $\mathbb{W}$ )  
0, 1, 2, 3, ...

Natural Numbers ( $\mathbb{N}$ )  
1, 2, 3, 4,  $\sqrt{25}$

→ -3 ∈  $\mathbb{I}, \mathbb{Q}, \mathbb{R}$   
→  $\frac{1}{4}$  ∈  $\mathbb{Q}, \mathbb{R}$   
→  $\sqrt{1.44}$  ∈  $\mathbb{Q}, \mathbb{R}$   
→  $1.\overline{22}$

\* ∈ = belongs to ...

