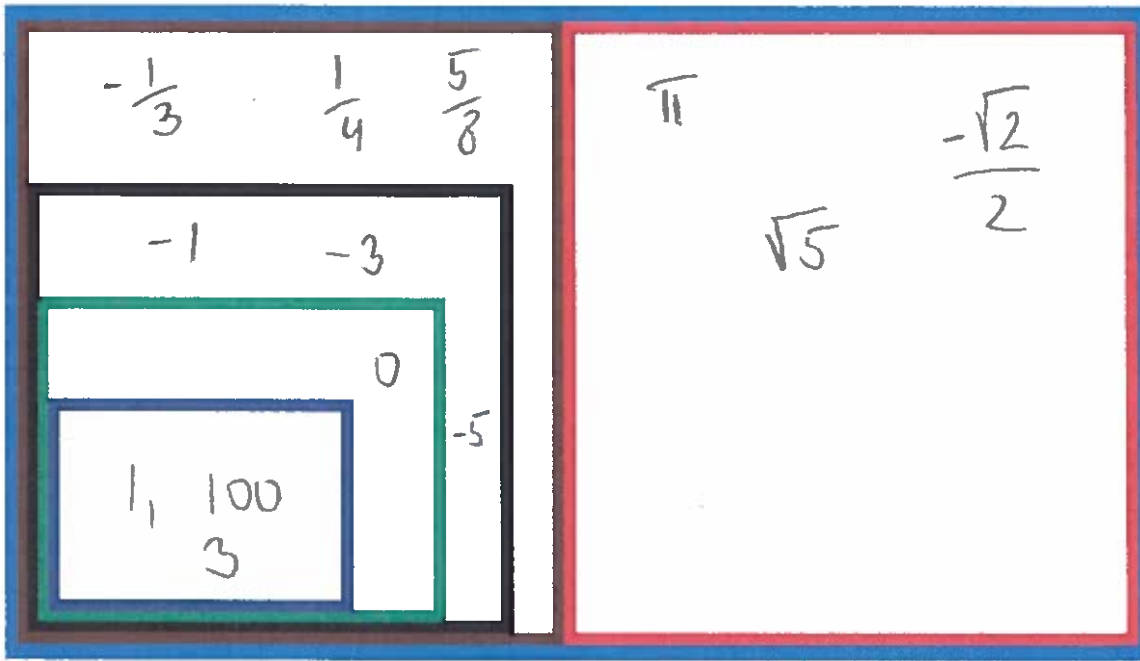


# Review

## The Real Number System

Not  $\mathbb{R}$  :  $\sqrt{-16}$ ,  $\sqrt{-\pi}$   
 $\sqrt[4]{7}$ , ...



Number set	Symbol	10 examples
Real numbers	$\mathbb{R}$	$\pi$ , 100, -3.5, $\frac{1}{3}$ , $\sqrt{25}$ , $\frac{15}{8}$ , 3.25, $\frac{\sqrt{7}}{3}$ , 1, 0
Rational numbers	$\mathbb{Q}$	$\frac{3}{2}$ , 0.25, -100, $\frac{15}{3}$ , $-100 \times 10^5$ , 5, $\frac{18}{53}$ , $-\frac{4}{9}$ , $\sqrt{16}$ , 0
Irrational numbers	$\bar{\mathbb{Q}}$	$\pi$ , $\sqrt{5}$ , $-\frac{\pi}{3}$ , $\frac{\sqrt{7}}{2}$ , e, $-\sqrt{3}$ , $\frac{\sqrt{2}}{2}$ , $3\pi$ , $\sqrt{20}$ , $\frac{17}{\pi}$
Integers	$\mathbb{Z}$	-1, 0, 1, 5, 100 000, $10^9$ , 8, -21, $\sqrt{36}$ , $\frac{\sqrt{100}}{2}$
Whole numbers	$\mathbb{W}$	0, 1, 2, 3, $10^6$ , 5, 100, 15, $\frac{11}{\pi}$ , 284
Natural numbers	$\mathbb{N}$	1, 2, 250, 371, $10^7$ , 13, 54, 109, 8, 21

not a proper set - good for high school