Whole numbers: 0, 1, 2, 3 ....

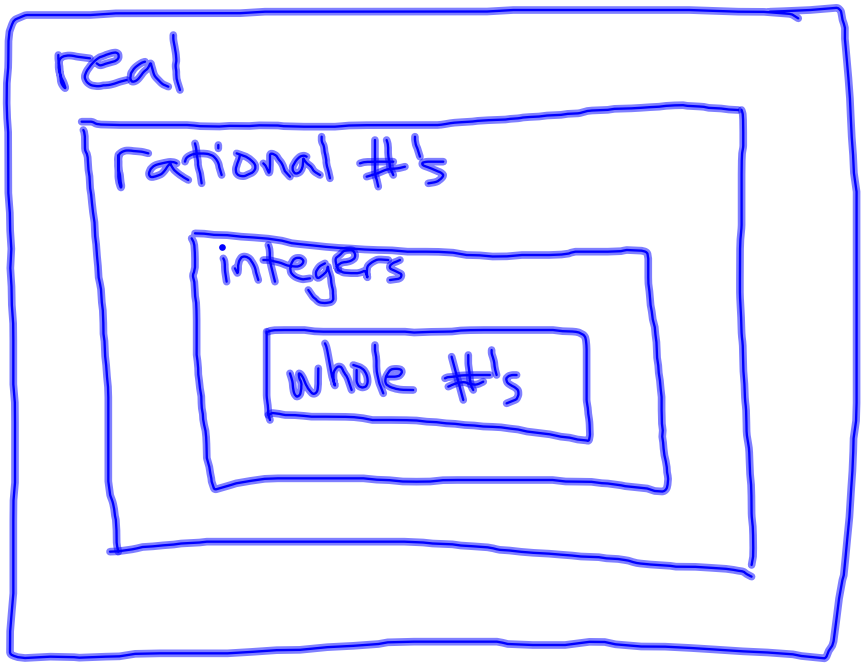
Integers: $-3, -2, -1, 0, 1, 2, 3 \cdots$

Rational #'s: $\frac{\text{integer}}{\text{integer}}$ $\frac{3}{2}$,

$\frac{-5}{-12}$, $-2.5 \rightarrow \frac{-5}{2}$

Real #'s: Includes irrational #'s

π, e



Rules of addition

→ if adding two #'s of the same sign — add & use sign

$3+4=7$ $\quad -3+-11=-14$

→ if adding two #'s with different signs — subtract the smaller # from the larger & use sign of larger #

$-11+17=6$ $\quad -12+6=-6$

Subtracting two numbers

$a-b \equiv a+{}^{-}b$

$a+b-c+d-e-f+g=a+b+{}^{-}c+d+{}^{-}e+{}^{-}f+g$

Properties of addition:

- Commutative

  $a+b=b+a$

  $a-b \neq b-a$

  $a+{}^{-}b={}^{-}b+a$

- transitive =

  $(a+b)+c=a+(b+c)$

- identity:

  $a+0 \cong a$

- inverse:

  $a+{}^{-}a=0$

p. 67 : 4-44 (every 4th), 58

p. 77 : 4-20 (every 4th), 32, 36, 42

p. 82 : 4-24 (every 4th)