Lesson 4-6 Rational Numbers

Definition: Rational Number

- Any number that can be written as a quotient $\frac{a}{b}$ of **two integers** where b is not zero
- Rational Numbers include
  - WHOLE NUMBERS (Positive Numbers)

  - INTEGERS (POSITIVE AND NEGATIVE)
  - FRACTIONS and DECIMALS

Whole Numbers

Integers

Fractions and Decimals

Equivalent Fractions

- If you have ½ what are ways you can write an equivalent fraction?

$$\frac{1}{2} =$$

Graphing Rational Numbers

Plot 0.75, $-\frac{3}{4}$

Graphing Rational Numbers

Evaluating Fractions Containing Variables

- Steps: Substitue
  - Simplify the NUMERATOR
  - Simplify the DENOMINATOR
  - Write Fraction In Simpilest Form

$\frac{a+b}{2}$

$a=10, b=6$

Example of evaluating Fractions with variables

$\frac{3x+b}{4}$ $x=2, b=10$

Example of evaluating Fractions with variables

$\frac{14+b}{x}$ $b=8, x=9$

Practice & Homework

- PB 4-6
- HW: Page 196 10-30 even