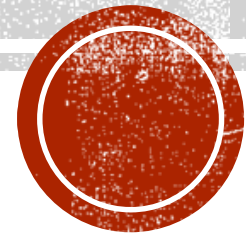


# RATIO AND PROPORTION



# RATIOS

- A ratio compares 2 things with the **SAME** units

$$\begin{array}{rcccl} \underline{5 \text{ boys}} & = & \underline{5} & & \\ 8 \text{ boys} & & 8 & & \end{array} \quad \begin{array}{c} 5 \text{ to } 8 \\ 5:8 \end{array}$$

- Equivalent fractions – fractions that equal the same number

$$\begin{array}{r} \underline{10} \\ 12 \end{array} = \begin{array}{r} \underline{5} \\ 6 \end{array}$$



# PROPORTION

- A proportion compares two ratios using an equal sign.
  - $\frac{1}{2} = \frac{4}{8}$



# SOLVING PROPORTIONS

$$\frac{a}{b} = \frac{c}{d}$$

Means – extremes

$$bc = ad$$

(sometimes called cross products)



**SOLVE:**

$$\frac{2}{3} = \frac{x}{18}$$

$$\frac{5}{4} = \frac{16}{x}$$

