

6.1 Proportions

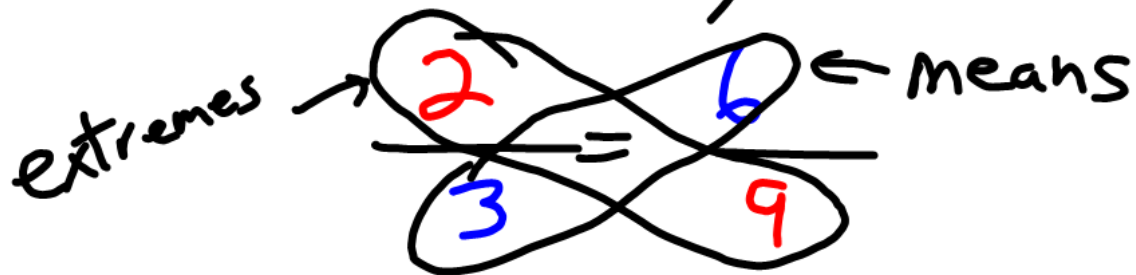
Ratio - comparison of
2 numbers as a fraction.

$$\frac{a}{b}$$

proportion -

2 Ratios are set
equal to each other.

solve by cross products



Find the ratios?

Team has 15 wins and 3
Losses. Ratio of wins
to losses.

$$\frac{15}{3} = \left(\frac{5}{1} \right)$$

208 to 18

$$\frac{208 \div 2}{18 \div 2} = \left(\frac{104}{9} \right)$$

Solve proportions

$$\frac{2.3}{4} = \frac{x}{3.7}$$

$$4x = (2.3)(3.7)$$

$$\frac{4x}{4} = \frac{8.51}{4}$$

$$x = 2.1275$$

$$\begin{array}{r}
 2.1275 \\
 4 \overline{) 8.5100} \\
 \underline{8} \\
 5 \\
 \underline{4} \\
 11 \\
 \underline{8} \\
 30 \\
 \underline{28} \\
 20 \\
 \underline{20} \\
 0
 \end{array}$$

$$\begin{array}{r}
 2.3 \\
 \times 3.7 \\
 \hline
 161 \\
 690 \\
 \hline
 8.51
 \end{array}$$

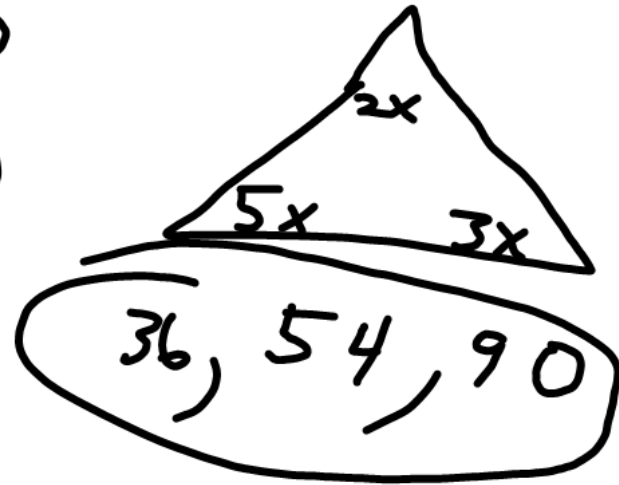
Find the measures of 3
angles whose ratio is

$$2:5:3$$

$$2x + 3x + 5x = 180$$

$$\frac{10x}{10} = \frac{180}{10}$$

$$x = 18$$



p. 286-287

6-26 even