

Ratios + Rates

Ratios

Compares 2 things



stars to moons

$3:1$ $3 \text{ to } 1$ $\frac{3}{1}$

Order is very important

stars to moons $3:1$ $\frac{3}{1}$

moons to stars $1:3$ $\frac{1}{3}$

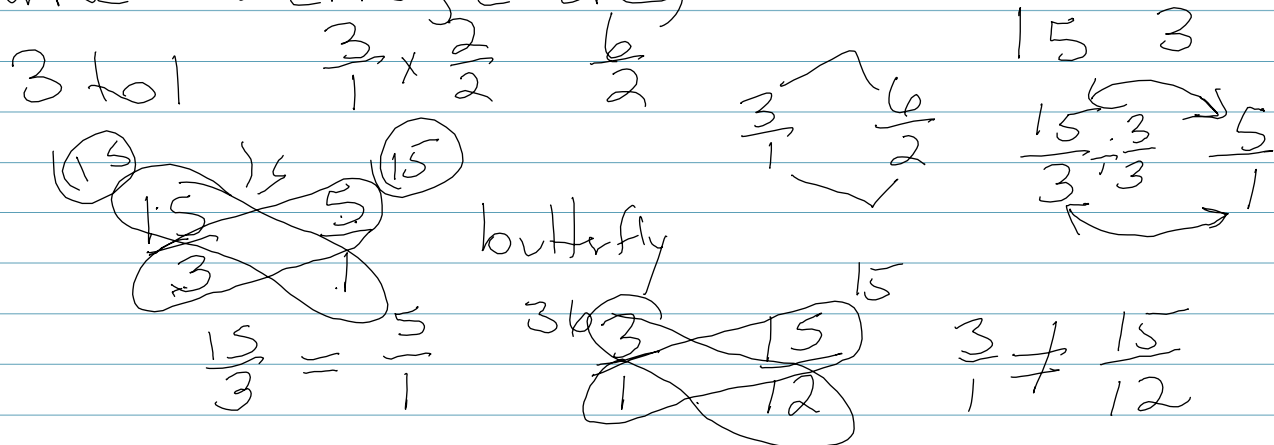
Equivalent Ratios:

name the same comparison.

multiply or divide both terms by the same #. (magic one)

$3 \text{ to } 1$ $\frac{3}{1} \times \frac{2}{2} = \frac{6}{2}$ $\frac{15}{3}$ $\frac{3}{1}$ $\frac{15}{3}$ $\frac{5}{1}$

$\frac{15}{3} = \frac{5}{1}$ butterfly $\frac{3}{1} \neq \frac{15}{12}$



Unit Rate

Comparison to 1 unit

25 pages in 3 hours ? pages 1 hour

$$\frac{\text{Page } 25}{\text{hr } 3} = \frac{?}{1}$$

$$\frac{\$ 3.60}{8} = \frac{?}{1}$$

$$\begin{array}{r} .45 \\ 8 \overline{) 3.60} \\ \underline{-3.20} \\ 40 \end{array}$$