

6.1 Rates and Ratios

Comparison of two numbers

Rates two different units
ex miles hours dollars ounce

Ratios - compares
to numbers of the same unit

3in to 8in

6 boys : 12 girls

Can be written 3 ways

$\frac{a}{b}$, $a:b$, a to b

24ft by 13ft 6in

$\frac{288 \text{ in}}{18} : \frac{162 \text{ in}}{18}$

16in : 9in

Parts to total

6 boys : 8 girls 14 students

6 boys : 14 students

Ratios used to estimate totals
will use later in chapter

Rates

$$\frac{350 \text{ miles}}{5 \text{ hours}} = \frac{70 \text{ mi}}{1 \text{ hr}} \quad 70 \text{ mph}$$

unit rate
how much per 1 unit
(or when 1 is the denominator)

In shopping

we use unit rates to compare
prices

Find unit rate of both

32oz 4.75	60oz 7.25
$\frac{4.75}{32}$	$\frac{7.25}{60}$
14.8¢/oz	12¢/oz