5.1 Ratios and Rates

Ratio — a comparison between two things (using division)

EX: $\dfrac{3 \text{ girls}}{4 \text{ boys}}$ 3:4 , 3 to 4

Rate — a ratio of two things with different units.

EX: $\dfrac{60 \text{ miles}}{2 \text{ hours}}$ → miles & hours are being compared

means → 1

Unit Rate: a rate with a "denominator" of 1 unit ("per")

EX: $\dfrac{30 \text{ miles}}{1 \text{ hour}}$ ← unit rate

Example 1 : Write the ratio in simplest form for 7 apples to 14 oranges in your fridge.

÷7 (7 apples : 14 oranges) ÷7

1 apple : 2 oranges

$\dfrac{7}{14} = \dfrac{1}{2}$ * equivalent ratio (fractions)

Example 2: Using a ratio table to describe rates

unit rate

miles	15	30	45	60
hour	1	2	3	4

×2   ×4   ÷3   ×4

Example 3: Find the unit rate

÷2 (15 degrees : 2 hours) ÷2   OR $\dfrac{15}{2} = \dfrac{7.5}{1}$

7.5 degrees : 1 hours

equivalent