

RATIO

A RATIO

Definition Ratio

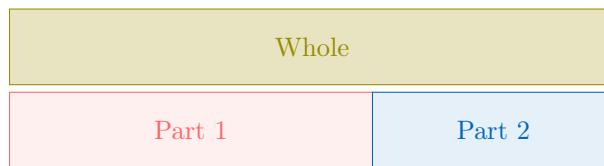
A **ratio** is a comparison of two quantities. The ratio 3 to 2 can be expressed as 3 : 2 or $\frac{3}{2}$.

B PART-PART RATIOS

Definition Part-Part Ratio

A **part-part ratio** compares two distinct parts of a whole.

Part 1 : Part 2



Ex: For one bowl of fruit juice, there are 3 cherries and 2 apples.



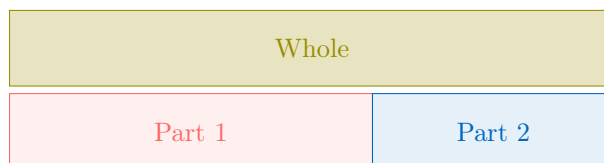
The ratio of cherries to apples is 3 : 2.

C PART-WHOLE RATIOS

Definition Part-Whole Ratio

A **Part-whole ratio** compares one part of a whole to the whole.

Part 1 : Whole or Part 2 : Whole



Ex: If a juice is made with 1 lemon and 2 oranges, find the ratio of oranges to the total number of fruits.



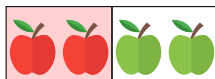
Answer:

- The total number of fruits is $1 + 2 = 3$.
- The ratio of oranges to the total number of fruits is 2 : 3 or $\frac{2}{3}$.

D EQUIVALENT RATIOS

Method Simplifying Ratios

The ratio of red apples to all apples is $\frac{2}{4}$, which can be simplified to $\frac{1}{2}$ (half of the apples are red).



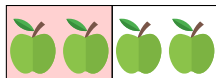
E PART IN WHOLE-PART RELATIONSHIPS

Method Finding Part in Whole-Part Relationships

To find the number of apples corresponding to $\frac{1}{2}$ of 4 apples:



- Draw the fraction:



- Count the apples in the colored part: there are 2 apples.