

Combining ratios

Use it when two ratios share a part, such as $a : b$ and $b : c$.

1

Line them up
Each ratio in its own row, under its names.

firstsharedlast

1st ratio

2nd ratio

the shared part sits in one column

2

Make the shared part match
Multiply each ratio so the shared part is the same: the LCM.

firstsharedlast

$\times ?$

$\times ?$

the shared parts now match

one shared part goes into the other? only that ratio changes

3

Read off the ratio you want
Take its two parts from the bottom row.

first : shared : last

first : last

simplify it if you can

The Maths Habit

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