

Ratio Study Guide

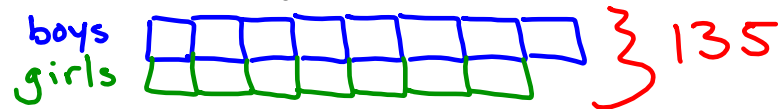
1. A ratio is a comparison of two numbers: in a dozen eggs, 3 are brown and the rest are white.

a. Part - to - part comparison: There are 12 eggs in total, but part of them are white and part of them are brown

brown: white

3 : 9    now reduce    1 : 3

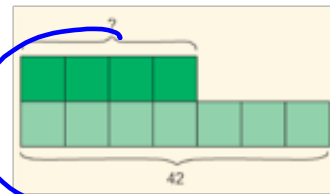
Ex: The ratio of boys to girls in a middle school soccer program is 8 : 7. If there are 135 students in the program, how many of them are girls?



$$\frac{135}{15} = 9 \text{ so } 9 \text{ goes in each box}$$

There are 7 boxes of girls  
so  $9 \times 7 = \underline{63}$  girls

Ex: Find the missing value:



$$\frac{42}{7} = 6$$

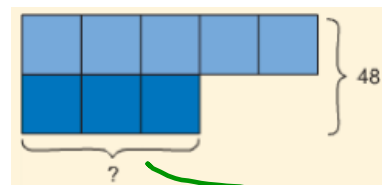
6 goes in each box  
 $6 \times 4 = \underline{24}$

b. Part - to whole comparison: How many brown eggs are there compared to the total number of eggs?

brown:total

3:12    now reduce    1:4

Ex: Find the missing value:



$$\frac{48}{8} = 6$$

6 goes in each box  
 $6 \times 3 = \underline{18}$