

Discussion Problems

Step 1: Using Ratio Language

National Curriculum Objectives:

Mathematics Year 6: (6R1) [Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts](#)

About this resource:

This resource has been designed for pupils who understand the concepts within [this step](#). It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

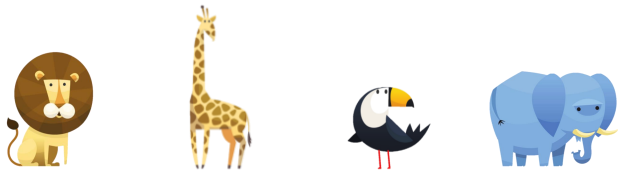
More [Year 6 Ratio](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Using Ratio Language

1. Callum visited the zoo and created three different statements about the number of animals he saw.

For each lion, there were more than twice as many giraffes.
For each giraffe, there were 2 toucans.
There was an even amount of elephants.
Altogether, I saw 50 animals.



:	:	:
:	:	:
:	:	:



How many of each animal could there have been?
Create 3 different ratios.

2. Salesman Sam is trying to calculate how many of each brand of television he sold at his shop last month.

For every ZG sold, 3 Tamtung sets were sold.
For every Tamsung sold, fewer than 3 Phony televisions were sold.



The number of Fillips and Fanasonic televisions sold was the same.
Altogether, we sold 100 televisions.



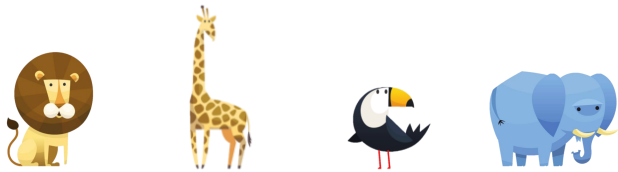
ZG	Tamsung	Phony	Fillips	Fanasonic
:	:	:	:	:
:	:	:	:	:
:	:	:	:	:

How many of each brand of television could he have sold?
Create 3 different ratios.

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1	:	3	:	6	:	40
3	:	7	:	14	:	26
4	:	12	:	24	:	10

Example answer above.
How many of each animal could there have been?
Create 3 different ratios.



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ZG		Tamsung		Phony		Fillips		Fanasonic
5	:	15	:	30	:	25	:	25
8	:	24	:	24	:	22	:	22
10	:	30	:	10	:	25	:	25

How many of each brand of television could he have sold?
Create 3 different ratios.

Example answer above.