


LO: To calculate the ratio (bronze)

1a. Use the image below to complete the ratio statements.




For every ___ oranges, there are ___ pears.

:

If there are 8 oranges, how many pears will there be?

★

1b. Katie is giving her party guests party hats using this ratio:



There are 30 party hats altogether. Eighteen children come to the party, $\frac{1}{2}$ of them choose a stripy hat.


How many children get a stripy hat?
 How many children get a spotty hat?
 How many spare stripy and spotty hats are there?

★

2a. There are 40 pencils and pens in a box. For every 1 pencil, there are 3 pens. Use the bar model to help you calculate:

How many pencils altogether?


How many pens altogether?



★

2b. Martin is sorting out his pencil case. He wants to have 2 pencils for every 1 pen.


Has he sorted it out correctly?



Explain your answer.

★

3a. What is the ratio of white stripes to black stripes?




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Use the ratio to calculate how many stripes there will be altogether if there are 6 white stripes.

white stripes
 black stripes
 stripes altogether

★

3b. For every 4 footballs, there are 8 football boots. There are 16 football boots altogether.



How many footballs are there?

If a pair of football boots goes missing, what is the new ratio of footballs to boots?

★


4.

The ratio of red to yellow counters is 2:3

There are 20 counters in total.

How many counters of each colour are there?

You can colour the counters to help you.



yellow red

5.


Esther is building a tower of cubes.

The ratio of red to yellow cubes is 3:1

The tower has 6 yellow cubes. How many red cubes are there?

LO: To calculate the ratio (silver)

4a. Use the image below to complete the ratio statements.



For every ___ apples, there are ___ bananas.

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If there are 12 apples, how many bananas will there be?

☆

5a. There are 28 pieces of fruit on a plate. For every 4 strawberries, there are 3 raspberries. Use the bar model to help you calculate:


How many strawberries altogether?

How many raspberries altogether?



☆

6a. What is the ratio of horses to giraffes?



:

Use the ratio to calculate how many animals there will be altogether if there are 20 horses.

horses

giraffes

animals altogether

☆

4b. Will is providing drinks for a school disco.

For every 4 bottles of pop, he takes 1 bottle of water.

There are 45 people going to the disco, $\frac{1}{3}$ of them want water.


How many bottles does Will take altogether?

How many bottles of water does he take?

☆

5b. Caleb is sorting jam flavours. He wants to arrange the flavours using the ratio 2 marmalade to every 3 strawberry jam.

Have the flavours been arranged correctly?



Explain your answer.

☆

6b. For every 2 cats in the kennel, there are 6 dogs. There are 24 dogs altogether.

One third of the dogs are out on their walk.

What is the new ratio of cats to dogs?

What is the new total number of animals?

☆

7.

Nijah plays 21 games of chess.

For every 2 games she wins, she loses 5 games.

How many more games does she lose than win?

A group of students study French or German in the ratio 3:7

a) Which subject has the most students? _____

b) Draw a diagram to represent this.

c) There are 80 students in total.

How many more students study German than French?

LO: To calculate the ratio (gold)

1.

- a) Huan is making a drink by mixing 1 part juice with 5 parts water.
Complete the table to show the amounts he would need to use.

Juice	Water
1 litre	5 litres
2 litres	
4 litres	
100 ml	
200 ml	
300 ml	
	30 litres
	750 ml

- b) Huan makes 1 litre 500 ml of drink in total.
How much juice and water does he need to use?

juice

water

2.

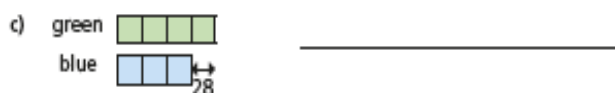
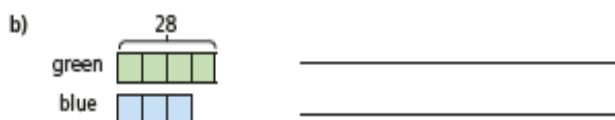
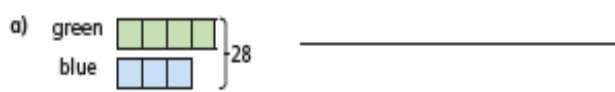
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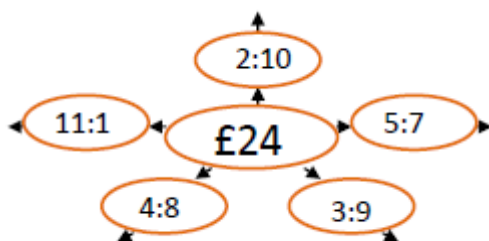
3.

Describe a situation for each bar model.



Calculate the value of the ratios

4.



5.

