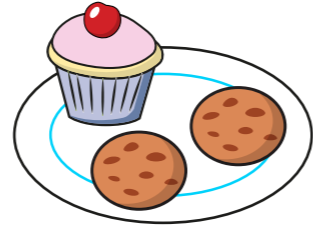


# Calculating ratio

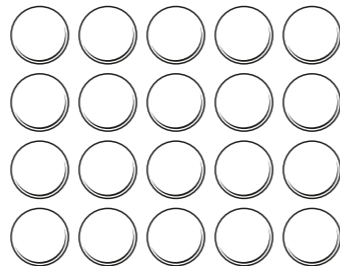
- 1 Eva is baking cakes and cookies.  
For every 1 cake, she will bake 2 cookies.



- a) If Eva bakes 3 cakes, how many cookies will she bake?

- b) If Eva bakes 10 cookies, how many cakes will she bake?

- 2 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

- 3 Tom has 5 green cubes for every 3 yellow cubes.  
He has 16 cubes in total.  
Draw a diagram to represent this.

- 4 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?

- 5 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?



- 6 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

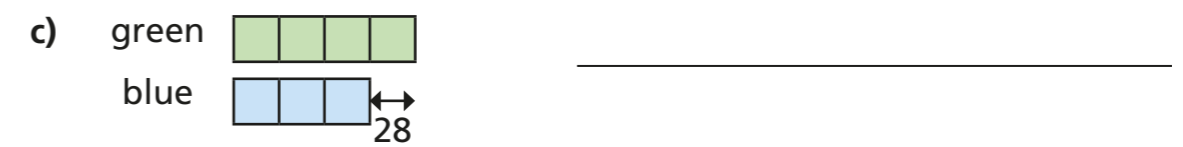
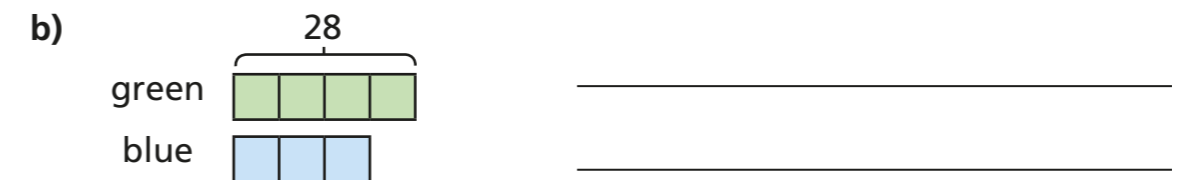
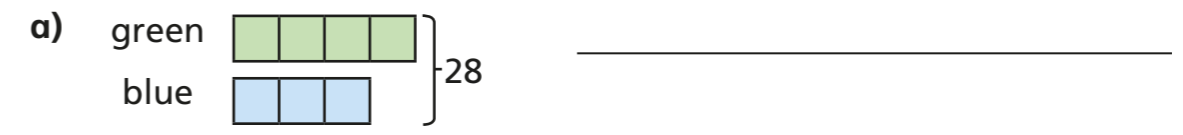
water

- 7 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?

- 8 Describe a situation for each bar model.



Compare answers with a partner.  
What is the same and what is different?

