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 12  red 8

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?

   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.

<table>
<thead>
<tr>
<th>Juice</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 litre</td>
<td>5 litres</td>
</tr>
<tr>
<td>2 litres</td>
<td>10 litres</td>
</tr>
<tr>
<td>4 litres</td>
<td>20 litres</td>
</tr>
<tr>
<td>100 ml</td>
<td>500 ml</td>
</tr>
<tr>
<td>200 ml</td>
<td>1 litre</td>
</tr>
<tr>
<td>300 ml</td>
<td>1.5 litres</td>
</tr>
<tr>
<td>6 litres</td>
<td>30 litres</td>
</tr>
<tr>
<td>150 ml</td>
<td>750 ml</td>
</tr>
</tbody>
</table>

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

juice [250 ml] water [1250 ml]

7 A group of students study French or German in the ratio 3:7
a) Which subject has the most students? German
b) Draw a diagram to represent this.

[Diagram showing French and German with different bars]

c) There are 80 students in total.
How many more students study German than French?

French [80]: German [56]

8 Describe a situation for each bar model.

a) green [28] blue [18]
The ratio of green to blue sweets is 4:3. There are 28 sweets in total.

b) green [28]
blue [18]
The ratio of green to blue sweets is 4:3. There are 28 green sweets.

c) green [28] blue [18]
The ratio of green to blue sweets is 4:3. There are 28 more green sweets than blue sweets.

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