

Y8 – Autumn – Block 1 – Step 3 – Solve problems involving ratios of the form 1 : n (or n : 1)

Question	Answer												
1	a) For every 1 tray, there are 6 muffins. b) The ratio of trays to muffins is 1 : 6 c) For every 6 muffins, there is 1 tray. d) The ratio of muffins to trays is 6 : 1 e) 12 f) 18 g) 5												
2	a) 200 g b) 100 g c) The amounts of flour and sugar are the same in each question because the ratio is 1 : 1												
3	a) Cordial Water b) <table border="1"> <tr> <td>20</td> </tr> </table> <table border="1"> <tr> <td>20</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> </tr> </table> 120 ml of juice can be made using 20 ml of cordial. c) <table border="1"> <tr> <td>4</td> </tr> </table> <table border="1"> <tr> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> </table> 24 ml of juice can be made using 20 ml of water. d) The ratios are the same but in part b 20 ml represented one part and in part c 20 ml represents 5 parts.	20	20	20	20	20	20	4	4	4	4	4	4
20													
20	20	20	20	20									
4													
4	4	4	4	4									
4	a) Method 1 – Each part should contain 13 Method 2 – Multiply each side of the ratio by 13 Method 3 – Multiply both numbers on the double number line by 13 There are 13 adults in the school. b) Students will need to discuss and justify their reasons verbally. They may comment on the efficiency of a method and when one method is more suitable than another.												
5	75												
6	a) 450 b) 50 c) 100												
7	a) The 1 because it is the smaller number in the ratio. b) 25 cm												