Ratio Problems
ANSWERS

Section A: *Simplify the ratios*

1)   3:12 **1:4**   2)   5:30 **1:6**   3)   2:14 **1:7**   4)   3:15 **1:5**   5)   10:30 **1:3**   6)   6:60 **1:10**

7)   2:16 **1:8**   8)   4:24 **1:6**   9)   8:24 **1:3**   10)   9:27 **1:3**   11)   11:55 **1:5**   12)   7:42 **1:6**

Section B: *Simplify the ratios*

1)   10:15 **2:3**   2)   8:12 **2:3**   3)   55:66 **5:6**   4)   14:21 **2:3**   5)   10:25 **2:5**   6)   8:10 **4:5**

7)   12:16 **3:4**   8)   9:15 **3:5**   9)   36:60 **3:5**   10)   27:36 **3:4**   11)   20:50 **2:5**   12)   6:21 **2:7**

Section C: *Share the amounts into the following ratios*

1) £100 into the ratio 3:7 **£30:£70** 2) £25 into the ratio 2:3 **£10:£15** 3) £18 into the ratio 4:5 **£8:£10**

4) £48 into the ratio 2:2 **£24:£24** 5) £56 into the ratio 3:5 **£21:£35** 6) £77 into the ratio 5:2 **£55:£22**

7) £24 into the ratio 1:3:8 **£2:£6:£16**   8) £60 into the ratio 6:4:5 **£24:£16:£20**   9) £28 into the ratio 4:3:7 **£8:£6:£14**

Section D

1)   *In class 9A the ratio of boys to girls is 3:4. If there are 12 boys, how many girls are there?* **16**

2)   *In class 9B the ratio of boys to girls is 5:4. If there are 15 boys, how many girls are there?* **12**

3)   *In class 9C the ratio of boys to girls is 7:5. If there are 21 boys, how many girls are there?* **15**

4)   *In class 9D the ratio of boys to girls is 3:4. If there are 12 girls, how many boys are there?* **9**

5)   *In class 9E the ratio of boys to girls is 2:7. If there are 14 girls, how many boys are there?* **4**

6)   *In class 9F the ratio of boys to girls is 8:3. If there are 9 girls, how many boys are there?* **24**

7)   *In class 9G the ratio of boys to girls is 2:10. If there are 5 girls, how many boys are there?* **1**

8)   *In class 9H the ratio of boys to girls is 7:4. If there are 12 girls, how many students are there in total?* **33**

Section E

1)   *Divide £1500 between David and Sammie in the ratio 3:7* **£450 : £1050**

2)   *Share £90 in the ratio 1:2:6* **£10: £20: £60**

3)   *Peter and Jamal share £250 000 of the profit from their business in the ratio 2:3 respectively. How much profit did Peter receive ?* **£100 000**

4)   **a.**   *In a school year the ratio of boys to girls is 3:4. If there are 372 boys, how many girls are there?* **496**

   b.   *In another school year the ratio of boys to girls is 2:5. If there are 275 girls, how many boys are there?* **110**

5)   *Bronze is a mixture of copper and tin. The copper and tin are mixed in the ratio 9:1 by weight.*

   a.   *How much copper is there in a bronze brooch weighing 360 g?* **324g**

   b.   *Another bronze brooch contains 670.5g of copper. How much does it weigh altogether ?* **745g**

6)   *Magic Smoothie is mixed with strawberries and bananas in the ratio 7:3. Gill makes a smoothie using 144g of bananas. How many grams of Strawberry does she use?* **336g**

7)   *A man and a woman share a cash prize of £2855 between them in the ratio 1:4 respectively. The woman shares her winnings between herself, her daughter and her son in the ratio 5:1:2. How much does her daughter receive?* **£571**