

## Writing and Simplifying Ratio Exam Practice



- Q1. Write down the ratio  $12 : 30$  in its simplest form. (2 marks)
- Q2. Write down the ratio  $400 : 120$  in its simplest form. (2 marks)
- Q3. Write down the following ratio in its simplest form:-  
 $500 : 3000 : 275$  (2 marks)
- Q4. Write down the following ratio in its simplest form:-  
 $616 : 4480 : 112$  (2 marks)
- Q5. Simplify the ratio,  $4 \text{ kg} : 800 \text{ g}$  (2 marks)
- Q6. Simplify the ratio,  $280 \text{ cm} : 6.5 \text{ m}$  (2 marks)
- Q7. Express the ratio  $3 : 8$  in the form  $1 : n$  where  $n$  is a number to be found. (2 marks)
- Q8. Express the ratio  $2 : 9$  in the form  $n : 1$  where  $n$  is a number to be found. (2 marks)
- Q9. Simplify the ratio,  $\frac{3}{8} : \frac{5}{8}$  (2 marks)
- Q10. Simplify the ratio  $\frac{18}{24} : \frac{45}{60}$  (2 marks)
- Q11. Express the ratio  $\frac{8}{9} : 3$  in the form  $1 : m$  where  $m$  is a number to be found. (2 marks)
- Q12. Simplify the ratio,  $0.2 : 0.05 : 1.75$  expressing your answer in the form  $a : b : c$  where  $a$ ,  $b$  and  $c$  are whole numbers. (2 marks)



## Applied Mixed Practice Problems

Q13. In a box of sweets,  $\frac{1}{3}$  of them are chocolates,  $\frac{2}{5}$  are toffees and the rest are caramels.

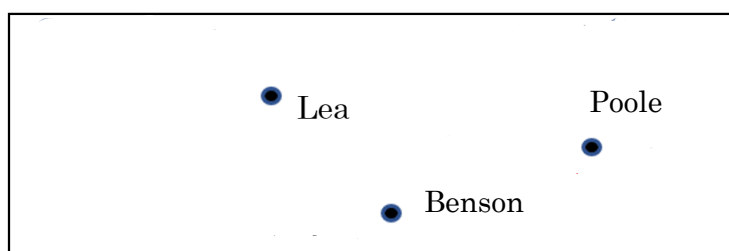
(i) Write down the ratio of toffees to chocolates

(1 mark)

(ii) Work out the ratio of caramels to chocolates

(2 marks)

Q14. Here is a map. In real life, Benson and Poole are 15 km apart.



Work out the scale of the map, giving your answer in the form 1 : n where n is a number to be found.

(2 marks)

Q15. In a sixth form, the ratio of those studying English to Biology is 3.5 : 2. There are  $2\frac{1}{2}$  times as many pupils studying Computing as Biology.

(i) Find the ratio of pupils studying English to Biology to Computing in the school, giving your answer using whole numbers only.

(2 marks)

(ii) Write down the fraction of pupils studying English.

(1 mark)

Q16. In an archery contest, 8 points are scored by hitting the red circle, 6 points for hitting the blue, and 3 points for hitting the yellow. Rob hits 3 reds, 1 blue and 3 yellows. Nigel hits 1 red, and 6 yellows.

(i) Work out the ratio of reds to non-reds which were hit during the contest, simplifying your answer.

(2 marks)

(ii) Work out the ratio of Rob's total score to Nigel's total score, simplifying your answer.

(3 marks)