**Ratio and Proportion www.m4ths.com – Steve Blades ©**

(1) Simplify the ratio 3:6:18

(2) Share £30 in the ratio 1:4

(3) 6 identical pens cost £1.26. Find the cost of 7 pens.

(4) Which is better value? 23 biscuits for £4.14 or 31 identical biscuits for £5.27. YOU MUST SHOW YOUR WORKINGS AND JUSTIFY YOUR ANSWER.

(5) Some money was shared in the ratio 2:7. The smaller part was worth £14. How much was the larger part worth?

(6) Write the ratio 7:11 in the form 1:n

(7) Fred and Bob share some money in the ratio 2:5. Bob has £12 more than Fred. How much does Fred have?

(8) Write the ratio $\frac{1}{5}:\frac{4}{5}$ in its simplest form.

(9) It takes 2 men 4 days to build a wall. How long would it take one man to build 4 walls if they worked at the same rate?

(10) Write the ratio $\frac{2}{7}:\frac{1}{14}$ in its simplest form.

(11) Share £40 in the ratio 1:1:1:2

(12) Write the ratio 5:13 in the form n:1

(13) Fred and Bob share a cake. Fred has one sixth of the cake and Bob has the rest. What ratio did they share the cake in?

(14) Andy, Bob and Chad share some money in the ratio 1:3:6. Chad has £20 more than Andy. How much money was shared?

(15) There are less than 30 counters in a bag. The counters are red or blue. The ratio of red to blue is 3:4. What is the maximum possible number of counters in the bag?

(16) John got 38% of the questions in a maths test correct. He got the rest of the questions incorrect. What was the ratio of correct to incorrect answers? Give your answer as a fully simplified ratio.

(17) Some money is shared in the ratio 2 : m : n. The middle share is twice the smallest share and one third of the largest share. Find the value of m and the value of n.

(18) Which is better value? 24 cakes for £39.60 or 42 cakes for £65.94? YOU MUST SHOW YOUR WORKINGS AND JUSTIFY YOUR ANSWER.

(19) The ratio of cats to dogs is 3:8. The ratio of dogs to frogs is 4:7. What is the ratio of cats to frogs?

(20) 29 identical cakes cost £44.66. Fred wants to buy 50 of the cakes. He will get a 10% discount if he buys 50 cakes. What would be the cost of the £50 cakes?