FOUNDATION & HIGHER

SAME AT BOTH TIERS

Name ..... Class .....

R5: Sharing in a ratio

Solve problems involving dividing quantities in a ratio

20 marks · 25 minutes · Non-calculator

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1) £120 is shared between A, B and C in the ratio 2 : 3 : 5. C then gives a third of her share to A. How much does A have now?

£ .....

[Question 1: 3 marks]

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2) A 1.5-litre carton contains orange and mango juice in the ratio 3 : 2. How much mango juice must be added to make the ratio 1 : 1?

..... litres

[Question 2: 3 marks]

3) Pasta costs £1.80 for 400 g, £3.30 for 750 g or £4.50 for 1 kg. Which is the best value? Show your working.

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[Question 3: 3 marks]

4) A class of 36 has boys and girls in the ratio 5 : 4. 4 girls leave. Find the new ratio of boys to girls in its simplest form.

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[Question 4: 2 marks]

5) A recipe for 6 people uses 300 g of pasta and 450 ml of sauce. Alex has 1 kg of pasta and 1 litre of sauce. What is the greatest number of people he can feed?

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[Question 5: 3 marks]

6) Two partners share profits in the ratio 2 : 3. One receives £4500 more than the other. Find the total profit.

£ .....

[Question 6: 3 marks]

7) £1 = $1.25 and £1 = 1.15 euros. Change $100 into euros.

..... euros

[Question 7: 3 marks]

End of paper – 20 marks in total

Answers and brief mark scheme

Q	Answer	Method / notes
1	£44	Shares 24, 36, 60 (P1); C gives 20 (P1); A1.
2	0.3	Orange 0.9, mango 0.6 (P1, P1); A1.
3	750 g	45p, 44p, 45p per 100 g (P1, P1); A1.
4	5 : 3	20 boys, 16 girls (P1); 20 : 12 (A1).
5	13	Pasta allows 20, sauce allows 13.3 (P1, P1); 13 (A1).
6	£22 500	1 part = £4500 (P1, P1); A1.
7	92	$100 = £80 (P1, P1); A1.