



Aberdare Community School
Mathematics Department

WJEC GCSE

Higher – Calculator

Number

Ratio

Name:

Set:

Date:

Teacher:

5. (a) Andrew sells his house for £210 000.

(ii) Charlie, Mary and Sian buy the house for £210 000.
They contribute to the cost of buying the house in the ratio 8:7:5.
How much does each contribute?

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Charlie contributes £

Mary contributes £

Sian contributes £

[7]

1. (a) Two brothers share £80 in the ratio of 1 : 4. How much does each receive?

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[2]

9. Three friends decide to share the cost of a season ticket in the ratio of the numbers of games they will attend, which is 5 : 6 : 8. The cost of the season ticket is £665. How much will each of the three friends have to pay?

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[3]

10. (a) Three people share £4500 in the ratio 2 : 5 : 8.
How much does each person receive?

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[3]

6.

(c) Two friends share £280 in the ratio 3 : 4. Find how much **each** friend receives.

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[2]

6. A garden centre makes compost for planting.
The compost is made by mixing peat, fertilizer and grit.
Eight buckets of the compost are made using 5 buckets of peat, 2 buckets of fertilizer and 1 bucket of grit.

(a) How many buckets of fertilizer are needed to make 100 buckets of compost?

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[2]

1. (a) Red and blue paints are mixed in the ratio of 3:2 to make a shade of purple paint.
Given that 10.5 litres of purple paint is made, calculate the quantity of red paint used.

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[2]

7. (a) Ruth and Tony share £1491 in the ratio 2 : 5.
Calculate how much they each receive.

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Ruth £

Tony £

[2]



7.

- (c) Ben and Cheryl's cycle-computers showed 24 km after the ride.
 The ratio of the distance Ben cycled to the distance he pushed his bike uphill was 5:1.
 The ratio of the distance Cheryl cycled to the distance she pushed her bike uphill was 11:1.

Calculate how far Ben cycled and how far he pushed his bike uphill.

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Cycled km Pushed bike uphill km

Calculate how far Cheryl cycled and how far she pushed her bike uphill.

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Cycled km Pushed bike uphill km

[4]

6. Natasha, Aled and Sara buy a computer between them.
They share the cost of the computer in the ratio 2:3:5.
Natasha pays the smallest share and Sara pays the largest share.
Aled pays £195 towards buying the computer.
Calculate how much the computer costs to buy.

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[3]

4. Toby and his sister share £42.21 in the ratio of 1 : 6.
Calculate how much each of them will receive.

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[2]



5. *Dees Print*, a graphic design company, finds that they use 2 yellow, 8 red and 20 black cartridges each week. So, *Dees Print* always orders yellow, red and black cartridges in the ratio 2 : 8 : 20 respectively.



- (a) *Dees Print* orders 210 cartridges in total.
How many cartridges of each of the colours yellow, red and black are there in this order?

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Number of yellow cartridges

Number of red cartridges

Number of black cartridges

[3]

- (b) In another order, x yellow cartridges are ordered, along with the corresponding number of red and black cartridges.
 T is the total number of cartridges in the order.
Write down a formula for T in terms of x .
Give your answer in its simplest form.

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[3]

- (c) A new cupboard is bought to store cartridges.
It can hold a total of P cartridges.
When the cupboard is full, the number of yellow, red and black cartridges stored will always be in the ratio 2 : 8 : 20 respectively.

Write down an expression, in terms of P , for the number of **red** cartridges this cupboard can hold.

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[2]

1.

- (c) Cheryl and her sister share an amount of money in the ratio 2 : 3 respectively.
What fraction of the money will Cheryl receive?

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[1]

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Shopping list	
Colour	Number and sizes of tins to buy
White	
Red	
Yellow	

[8]

4364
02/00/07

5. (a) An amount of money is shared by three people in the ratio 2 : 5 : 8.
What fraction of this money is given to the person who receives the smallest share? [2]

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5. Two brothers, Gethin and David, share a sum of money in the ratio 2 : 7.
David gets £30 more than Gethin. Calculate how much money the brothers share. [4]

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(b) Tomos and Rita share £27 in the ratio 1 : 8.
Calculate Rita's share of the money.

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2. Ioan, Meinir and Gerallt share a sum of money.

Ioan receives $\frac{1}{5}$, Meinir receives $\frac{3}{10}$, and Gerallt receives $\frac{1}{2}$.

In what ratio do they share the money?
Give your ratio in its simplest form.

[3]

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Ioan : Meinir : Gerallt
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