



Aberdare Community School
Mathematics Department

WJEC GCSE

Higher – Calculator

Number

Reverse percentages

Name:

Set:

Date:

Teacher:

- 13.** An electricity bill was £89.46 inclusive of V.A.T. at 5%. What was the cost of the electricity bill before V.A.T. was added?

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[3]

10.

- (c) The price of a watch bought on holiday abroad includes 5% tax. The tax can be reclaimed at the airport when returning to the United Kingdom.
The watch costs 68.25 dollars including the tax.
Calculate how much tax can be reclaimed at the airport.

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[3]

(c) The cost of a meal for a group of people, including an 8% service charge, is £203.04.
Calculate the cost of the meal before the service charge was added.

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[3]



10. In a sale the price of a shed is reduced by 30% of its original price.

The sale price of the shed is £182.

Calculate the original price of the shed.

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[3]

11. The weight of fruit collected from an orchard decreases by 8% each year.

This year, 2116 kg of fruit was collected.

What weight of fruit was collected one year ago?

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9. A shop has reduced the price of a bicycle by 40% of its original price.

The sale price of the bicycle is £192.

Calculate the original price of the bicycle.

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[3]



11. Carys invested some money in a new bank account that paid interest at 4% per annum. No further deposits or withdrawals were made. At the end of one year she had £884 in this account.

How much money did Carys originally invest?

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13. A shopkeeper calculates the selling price of a coat by increasing the manufacturer's price by 18%.
In a sale, the shopkeeper reduced the selling price of the coat by 15%. The sale price of the coat was £90.27.
Calculate the manufacturer's price for the coat.

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[5]

10. This year a conservation group counted the number of trees in a park and recorded a total of 1144 trees.

They claim that there has been a reduction of 35% in the number since they last counted the trees in 2006.

How many trees were there in the park in 2006?

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[3]

8. The financial press has just published the following headline.

PURKOZI Ltd.
Annual profit £4,760,000
Down 13% from last year

What was the profit made by this company last year?
Give your answer to the nearest ten thousand pounds.

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[4]



9. (a) A garage in a European country has included VAT at $17\frac{1}{2}\%$ in the car prices shown on the information tickets.

	FireFly 2.6 litre Sports Coupé
	Price 34 990 euros including VAT

The government decides to change the rate of VAT to 24%.

Calculate the price to be displayed on the information ticket for the car shown above following the change in VAT.

Give your answer correct to the nearest ten euros.

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[4]

9. (a) A measurement has been increased by 26%.
After the increase the measurement is 57.96 cm.
Calculate the original measurement.

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[3]

Examiner
only

12. A farmer decided that he would gradually decrease the number of acres he was using for growing wheat.

His plan was to reduce the number of acres each year by $\frac{1}{4}$ of what it was the previous year.

He now has 450 acres for growing wheat.

How many acres did he have for growing wheat two years ago?

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12. Complete the table below.

Original amount	After a decrease of	
	40%	2%
£	£492	£

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(b) Given that 65% of a measurement is 43.55 metres, calculate the whole measurement. [2]

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9. A major high street store employs 3655 people.
This is a reduction of 14% in the number of people it employed last year.

How many people were employed by the store last year?

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6. The bill for repairing a washing machine came to £151.68, inclusive of VAT at 20%.
What was the cost before VAT was added?

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4351
02/00/09

(c) Siwan is considering the initial cost of some parsnips.



The initial cost of an order is the price paid to the supplier plus the amount paid for package and delivery.

Siwan charged £24.30 for an order of parsnips.
Siwan made a 35% profit on the order.
Calculate the initial cost of the order.

[2]

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5.

(b) Percentage change can be calculated by using multipliers.

A final answer is calculated as follows:

- £400 is increased by 26%
- The increased answer is then decreased by 24%
- This gives the final answer

The calculation to work out the final answer can be expressed, using multipliers, as the **product of three numbers**.

Complete the statement below.

[2]

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Final answer = £400 × ×

(c)



Levi also sells bags of crisps.
He sells a bag of crisps for £1.68.
He makes a profit of 12% on the cost price of a bag of crisps.

He buys the bags of crisps in boxes.
Each box contains 10 bags of crisps.

Calculate the cost price of a **box** of crisps.

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4362
02/0013

10. Since being given a new feed, a pig has shown a 25% increase in weight. The pig now weighs 297 pounds (lb). What did the pig weigh when it was first started on the new feed? Give your answer in **kilograms (kg)**.

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