

WJEC GCSE MATHS • GRADE 2

MATHS



MODEL ANSWERS

FINANCIAL MATHS (FOUNDATION A)

SCORE

/185

PERCENTAGE

%

STEMUP

- 1 The tables show a payslip for one month.
Write down the net pay.

Earnings

Item	Amount
Basic pay	£2,225.00
Overtime	£75.00
Gross pay	£2,300.00
Net pay	£1,857.00

Deductions

Item	Amount
Income tax	£195.25
National Insurance	£161.75
Pension	£86.00
Total deductions	£443.00

Read net pay from the table

£1,857

1 / 1

- 2 The table shows a bank statement.
What was the balance after the entry for refund?

Bank statement

Date	Description	Credit	Debit	Balance
1 Mar	Opening balance			£145.00
4 Mar	Refund	£110.00		£255.00
10 Mar	Gift	£50.00		£305.00
15 Mar	Sale of bike	£30.00		£335.00
17 Mar	Sale of bike	£85.00		£420.00
19 Mar	Refund	£365.00		£785.00

Read the balance in the row for Refund

£255

1 / 1

- 3 The table shows two meter readings, in kWh, for an electricity meter.
How many units of electricity were used?

Electricity meter readings (kWh)

Previous reading	Present reading
23,320	23,765

$$23,765 - 23,320 = 445$$

445 kWh

1 / 1

- 4 The tables show a payslip for one month.
How much more is the gross pay than the net pay?

Earnings

Item	Amount
Basic pay	£1,275.00
Overtime	£35.00
Gross pay	£1,310.00
Net pay	£887.25

Deductions

Item	Amount
Income tax	£225.25
National Insurance	£142.75
Pension	£54.75
Total deductions	£422.75

$$£1,310 - £887.25 = £422.75$$

£422.75

1 / 1

- 5 The table shows a bank statement.
What was the balance after the entry for car insurance?

Bank statement

Date	Description	Credit	Debit	Balance
1 Mar	Opening balance			£580.00
5 Mar	Wages	£90.00		£670.00
7 Mar	Cash paid in	£100.00		£770.00
11 Mar	Car insurance		£180.00	£590.00
15 Mar	Groceries		£200.00	£390.00
20 Mar	Cash paid in	£335.00		£725.00

Read the balance in the row for Car insurance

£590

1 / 1

- 6 Sam earns £25,200 a year.
How much does he earn each month?

$$£25,200 \div 12 = £2,100$$

£2,100

1 / 1

- 7 The price of a coat, including VAT, is £48.
The price before VAT is £40.
Work out the amount of VAT that has been added.

$$£48 - £40 = £8$$

£8

1 / 1

- 8 The table shows a bank statement.
What was the balance after the entry for car insurance?

Bank statement

Date	Description	Credit	Debit	Balance
1 Mar	Opening balance			£205.00
10 Mar	Gift	£130.00		£335.00
12 Mar	Car insurance		£295.00	£40.00
17 Mar	Cash paid in	£25.00		£65.00
21 Mar	Clothes		£172.50	£-107.50
26 Mar	Birthday money	£65.00		£-42.50

Read the balance in the row for Car insurance

£40

1 / 1

- 9 Jon buys a games console for £41.50.
He sells it for £941.50.
Work out the profit or loss. State whether it is a profit or a loss.

$$£941.50 - £41.50 = £900 \text{ profit}$$

Profit of £900

1 / 1

- 10 In a sale, a bike helmet that normally costs £50 has 5% off.
Work out the amount saved.

$$5\% \text{ of } £50 = £2.50$$

£2.50

1 / 1

- 11 The price of a guitar is £200 before VAT is added.
VAT is 20%.
Work out the amount of VAT.

$$20\% \text{ of } £200 = £200 \div 5 = £40$$

£40

1 / 1

- 12 Bethan buys a watch for £27.
She sells it for £2,027.
Work out the profit or loss. State whether it is a profit or a loss.

$$£2,027 - £27 = £2,000 \text{ profit}$$

Profit of £2,000

1 / 1

- 13 In a sale, a TV that normally costs £200 has 10% off.
Work out the amount saved.

$$10\% \text{ of } £200 = £20$$

£20

/ 1

- 14 Lowri is paid £1,600 each month.
Work out her annual pay.

$$£1,600 \times 12 = £19,200$$

£19,200

/ 1

- 15 Huw buys a tablet for £39.50.
He sells it for £-460.50.
Work out the profit or loss. State whether it is a profit or a loss.

$$£39.50 - £-460.50 = £500 \text{ loss}$$

Loss of £500

/ 1

- 16 In a sale, a bike helmet that normally costs £30 has 40% off.
Work out the amount saved.

$$40\% \text{ of } £30 = £12$$

£12

1 / 1

- 17 Amira buys 4 tickets at £5.50 each.
She pays with a £30 note.
How much change does she get?

$$4 \times £5.50 = £22$$

$$£30 - £22 = £8$$

£8

1 / 1

- 18 The table shows the prices of three items, before VAT is added. VAT is 20%.
Work out the price of the rug including VAT.

Furniture

Item	Price (excluding VAT)
Rug	£60
Table	£120
Lamp	£28

$$20\% \text{ of } £60 = £12$$

$$£60 + £12 = £72$$

£72

1 / 1

- 19 In a sale, a TV that normally costs £200 has 50% off.
Work out the sale price.

$$50\% \text{ of } £200 = £100$$

$$£200 - £100 = £100$$

£100

/ 1

- 20 Priya buys 6 tickets at £3.75 each.
She pays with a £30 note.
How much change does she get?

$$6 \times £3.75 = £22.50$$

$$£30 - £22.50 = £7.50$$

£7.50

/ 1

- 21 Huw works 30 hours each week in a shop.
He is paid £9.90 per hour.
Work out how much he earns in 4 weeks.

$$30 \times £9.90 = £297 \text{ per week}$$

$$£297 \times 4 = £1,188$$

£1,188

/ 1

- 22 In a sale, a jacket that normally costs £60 has 20% off.
Work out the sale price.

$$20\% \text{ of } £60 = £12$$

$$£60 - £12 = £48$$

£48

1 / 1

- 23 Aled buys bread (£1.45), apples (£1.15) and cheese (£2.45).
He pays with a £10 note.
How much change does he get?

$$\text{Total} = £5.05$$

$$£10 - £5.05 = £4.95$$

£4.95

1 / 1

- 24 Megan works 12 hours each week in a gym.
She is paid £12.70 per hour.
Work out how much she earns in 4 weeks.

$$12 \times £12.70 = £152.40 \text{ per week}$$

$$£152.40 \times 4 = £609.60$$

£609.60

1 / 1

- 25 A phone contract costs £40. The price goes up by 30%.

Work out the new price.

$$30\% \text{ of } £40 = £12$$

$$£40 + £12 = £52$$

£52

1 / 1

- 26 Jess earns £17,400 a year.

Work out how much she earns each week, to the nearest penny.

There are 52 weeks in a year.

$$£17,400 \div 52 = £334.62$$

£334.62

1 / 1

- 27 Owen is paid £0.45 for each phone case he makes.

He makes 120 phone cases in one day.

Work out how much he is paid that day.

$$120 \times £0.45 = £54$$

£54

1 / 1

- 28 A concert ticket costs £80. The price goes up by 30%.
Work out the new price.

$$30\% \text{ of } £80 = £24$$

$$£80 + £24 = £104$$

£104

1 / 1

- 29 The table shows a bank statement.
How much less money is in the account at the end than at the start?

Bank statement

Date	Description	Credit	Debit	Balance
1 Mar	Opening balance			£505.00
10 Mar	Sale of bike	£210.00		£715.00
12 Mar	Wages	£290.00		£1,005.00
16 Mar	Council tax		£235.00	£770.00
19 Mar	Phone bill		£212.50	£557.50
25 Mar	Groceries		£255.00	£302.50

$$£505 - £302.50 = £202.50$$

£202.50

1 / 1

- 30 Dylan buys milk (£2.30), bread (£2.90) and apples (£2.85).
He pays with a £10 note.
How much change does he get?

$$\text{Total} = £8.05$$

$$£10 - £8.05 = £1.95$$

£1.95

1 / 1

- 31 A month of broadband costs £20. The price goes up by 15%.

Work out the new price.

$$15\% \text{ of } £20 = £3$$

$$£20 + £3 = £23$$

£23

1 / 1

- 32 An electricity bill is £240 before VAT is added.

VAT on energy is 5%.

Work out the total bill including VAT.

$$5\% \text{ of } £240 = £12$$

$$£240 + £12 = £252$$

£252

1 / 1

- 33 The table shows Ioan's income and spending for one month.

How much money does he have left at the end of the month?

Ioan's monthly budget

Monthly income and spending	Amount
Income	£1,800
Leisure	£70
Phone	£35
Food	£190
Transport	£60
Clothes	£45

$$\text{Spending} = £400$$

$$1800 - 400 = 1400$$

£1,400

1 / 1

- 34 A gym membership costs £20. The price goes up by 30%.
Work out the new price.

$$30\% \text{ of } £20 = £6$$

$$£20 + £6 = £26$$

£26

1 / 1

- 35 The table shows the times Sian worked last week.
Work out the total time she worked, in hours and minutes.

Hours worked

Day	Start	Finish
Tuesday	08:00	11:30
Friday	10:30	15:00
Saturday	10:00	13:30

Tuesday: 3 h 30 min

Friday: 4 h 30 min

Saturday: 3 h 30 min

total = 11 hours 30 minutes

11 hours 30 minutes

1 / 1

- 36 The table shows Carys's income and spending for one month.
How much money does she have left at the end of the month?

Carys's monthly budget

Monthly income and spending	Amount
Income	£1,200
Leisure	£115
Clothes	£60
Insurance	£75
Energy	£95
Transport	£120

Spending = £465

$$1200 - 465 = 735$$

£735

1 / 1

- 37 Jess is paid £15.70 per hour at a farm shop.
One week she earns £125.60.
How many hours does she work that week?

$$£125.60 \div £15.70 = 8$$

8 hours

/ 1

- 38 The table shows the times Ioan worked last week.
Work out the total time he worked, in hours and minutes.

Hours worked

Day	Start	Finish
Monday	11:00	15:30
Tuesday	08:00	11:30
Saturday	09:30	16:00

Monday: 4 h 30 min

Tuesday: 3 h 30 min

Saturday: 6 h 30 min

total = 14 hours 30 minutes

14 hours 30 minutes

/ 1

- 39 Callum's yearly water bill has a fixed charge of £60.
There is also a charge of £2.20 for each cubic metre of water used.
He uses 80 cubic metres of water in the year.
Work out the total yearly bill.

$$80 \times £2.20 = £176$$

$$£176 + £60 = £236$$

£236

/ 1

- 40 Bethan wants to buy a phone for £200.
She has already saved £20.
She saves £8 each week.
How many weeks will it take her to save enough?

$$180 \div 8 = 22.50$$

round up to 23 weeks

23 weeks

1 / 1

- 41 The table shows the times Evan worked last week.
Work out the total time he worked, in hours and minutes.

Hours worked

Day	Start	Finish
Monday	11:00	17:30
Wednesday	11:00	16:00
Thursday	09:00	16:00
Saturday	09:00	13:30

Monday: 6 h 30 min

Wednesday: 5 h

Thursday: 7 h

Saturday: 4 h 30 min

total = 23 hours

23 hours

2 / 2

- 42 Cerys runs a cake stall. She spends £15 on ingredients.
She sells 30 cakes at £1 each.
Work out the profit.

$$\text{Income} = 30 \times £1 = £30$$

$$\text{profit} = £30 - £15 = £15$$

£15

2 / 2

- 43 Sam wants to buy a tent for £200.
He has already saved £10.
He saves £12 each week.
How many weeks will it take him to save enough?

$$190 \div 12 = 15.83$$

round up to 16 weeks

16 weeks

2 / 2

- 44 Jon's yearly water bill has a fixed charge of £75.
There is also a charge of £1.95 for each cubic metre of water used.
He uses 110 cubic metres of water in the year.
Work out the total yearly bill.

$$110 \times £1.95 = £214.50$$

$$£214.50 + £75 = £289.50$$

£289.50

2 / 2

- 45 Packets of crisps cost £1.40 each.
A shop has the offer: buy one, get the second half price.
Work out the cost of 6 packets of crisps with this offer.

$$\text{Pairs} = 3$$

$$\text{cost of a pair} = £1.40 + £0.70 = £2.10$$

$$3 \times £2.10 = £6.30$$

£6.30

2 / 2

- 46 Gareth wants to buy a tent for £200.
He has already saved £20.
He saves £25 each week.
How many weeks will it take him to save enough?

$$180 \div 25 = 7.20$$

round up to 8 weeks

8 weeks

2 / 2

- 47 Carys works 35 hours at £10 per hour.
She also works 2 hours overtime at £11 per hour.
Work out her total pay.

$$35 \times £10 = £350$$
$$2 \times £11 = £22$$
$$\text{total} = £372$$

£372

2 / 2

- 48 Rhian is paid £0.40 for each box she makes.
She makes 150 boxes in one day.
She also gets a bonus of £15.
Work out how much she is paid that day.

$$150 \times £0.40 = £60$$
$$£60 + £15 = £75$$

£75

2 / 2

- 49 Tins of soup cost £1 each.
A shop has the offer: buy one, get the second half price.
Work out the cost of 6 tins of soup with this offer.

$$\text{Pairs} = 3$$

$$\text{cost of a pair} = £1 + £0.50 = £1.50$$

$$3 \times £1.50 = £4.50$$

£4.50

2 / 2

- 50 The table shows the prices of three items, before VAT is added. VAT is 20%.
Work out the total cost of the three items, including VAT.

Furniture

Item	Price (excluding VAT)
Rug	£60
Table	£120
Mirror	£40

$$\text{Total before VAT} = £220$$

$$\text{VAT} = £220 \div 5 = £44$$

$$\text{total} = £264$$

£264

2 / 2

- 51 Gwen works 37 hours at £14.20 per hour.
She also works 4 hours overtime at £18.20 per hour.
Work out her total pay.

$$37 \times £14.20 = £525.40$$

$$4 \times £18.20 = £72.80$$

$$\text{total} = £598.20$$

£598.20

2 / 2

- 52 Huw buys a lamp for £20.
He sells it and makes a profit of 10% of the price he paid.
Work out the selling price.

$$10\% \text{ of } £20 = £2$$

$$£20 + £2 = £22$$

£22

2 / 2

- 53 The table shows the prices of three items, before VAT is added. VAT is 20%.
Work out the total cost of the three items, including VAT.

Furniture

Item	Price (excluding VAT)
Shelf	£45
Mirror	£40
Cupboard	£95

$$\text{Total before VAT} = £180$$

$$\text{VAT} = £180 \div 5 = £36$$

$$\text{total} = £216$$

£216

2 / 2

- 54 Jess is paid £0.40 for each phone case she makes.
She makes 120 phone cases in one day.
She also gets a bonus of £15.
Work out how much she is paid that day.

$$120 \times £0.40 = £48$$

$$£48 + £15 = £63$$

£63

2 / 2

- 55 Rhian buys a bike for £250.
She sells it and makes a profit of 20% of the price she paid.
Work out the selling price.

$$20\% \text{ of } £250 = £50$$

$$£250 + £50 = £300$$

£300

2 / 2

- 56 The table shows the prices of three items, before VAT is added. VAT is 20%.
Work out the total cost of the three items, including VAT.

Furniture

Item	Price (excluding VAT)
Cupboard	£95
Shelf	£45
Mirror	£40

$$\text{Total before VAT} = £180$$

$$\text{VAT} = £180 \div 5 = £36$$

$$\text{total} = £216$$

£216

2 / 2

- 57 Liam is paid £0.30 for each toy part he makes.
He makes 150 toy parts in one day.
He also gets a bonus of £20.
Work out how much he is paid that day.

$$150 \times £0.30 = £45$$

$$£45 + £20 = £65$$

£65

2 / 2

- 58 Megan buys a chair for £60.
She sells it and makes a profit of 10% of the price she paid.
Work out the selling price.

$$10\% \text{ of } £60 = £6$$

$$£60 + £6 = £66$$

£66

2 / 2

- 59 Bars of chocolate cost £0.80 each.
A shop has the offer: buy one, get the second half price.
Work out the cost of 9 bars of chocolate with this offer.

$$\text{Pairs} = 4$$

$$\text{cost of a pair} = £0.80 + £0.40 = £1.20$$

$$4 \times £1.20 = £4.80$$

£4.80

2 / 2

- 60 Leah works 36 hours at £13.40 per hour.
She also works 10 hours overtime at £17.40 per hour.
Work out her total pay.

$$36 \times £13.40 = £482.40$$

$$10 \times £17.40 = £174$$

$$\text{total} = £656.40$$

£656.40

2 / 2

- 61 The table shows the prices of three items, before VAT is added. VAT is 20%.
Work out the total cost of the three items, including VAT.

Furniture

Item	Price (excluding VAT)
Rug	£60
Cupboard	£95
Table	£120

$$\text{Total before VAT} = £275$$

$$\text{VAT} = £275 \div 5 = £55$$

$$\text{total} = £330$$

£330

2 / 2

- 62 Yoghurts cost £1.20 each.
A shop has the offer: buy one, get the second half price.
Work out the cost of 12 yoghurts with this offer.

$$\text{Pairs} = 6$$

$$\text{cost of a pair} = £1.20 + £0.60 = £1.80$$

$$6 \times £1.80 = £10.80$$

£10.80

2 / 2

- 63 Leah earns £1,400 a month and spends £1,320 a month.
She wants to buy a sofa that costs £400.
Can she save enough in 2 months? Show how you decide.

$$\text{Saves } £1400 - £1320 = £80 \text{ each month}$$

$$80 \times 2 = 160$$

No: $£80 \times 2 = £160$, which is
less than £400

2 / 2

- 64 The table shows Nerys's income and spending for one month.
She saves all the money left each month.
How many months will it take her to save £6,420?

Nerys's monthly budget

Monthly income and spending	Amount
Income	£2,000
Transport	£50
Leisure	£150
Energy	£85
Rent	£600
Insurance	£45

Left each month = £1070

$$6420 \div 1070 = 6$$

6 months

2 / 2

- 65 Jon makes 20 cakes for £8.
He sells all of them for £1 each.
Work out the profit on each one.

Cost of each = £8 ÷ 20 = £0.40

profit on each = £1 - £0.40 = £0.60

£0.60

2 / 2

- 66 Rhian earns £1,250 a month and spends £1,170 a month.
She wants to buy a TV that costs £480.
Can she save enough in 3 months? Show how you decide.

Saves £1250 - £1170 = £80 each month

80 × 3 = 240

No: £80 × 3 = £240, which is less than £480

2 / 2

- 67 The table shows Dafydd's income and spending for one month.
He saves all the money left each month.
How many months will it take him to save £4,020?

Dafydd's monthly budget

Monthly income and spending	Amount
Income	£1,350
Food	£190
Gym	£40
Clothes	£30
Transport	£50
Insurance	£35

$$\text{Left each month} = £1005$$

$$4020 \div 1005 = 4$$

4 months

2 / 2

- 68 Aled makes 60 cakes for £45.
He sells all of them for £1.35 each.
Work out the profit on each one.

$$\text{Cost of each} = £45 \div 60 = £0.75$$

$$\text{profit on each} = £1.35 - £0.75 = £0.60$$

£0.60

2 / 2

- 69 Osian earns £900 a month and spends £750 a month.
He wants to buy a TV that costs £480.
Can he save enough in 4 months? Show how you decide.

$$\text{Saves } £900 - £750 = £150 \text{ each month}$$

$$150 \times 4 = 600$$

Yes: $£150 \times 4 = £600$, which is
more than £480

2 / 2

- 70 The table shows Dylan's income and spending for one month.
He saves all the money left each month.
How many months will it take him to save £6,450?

Dylan's monthly budget

Monthly income and spending	Amount
Income	£1,500
Phone	£35
Insurance	£35
Transport	£100
Clothes	£35
Food	£220

$$\text{Left each month} = £1075$$

$$6450 \div 1075 = 6$$

6 months

2 / 2

- 71 Bethan makes 24 cakes for £7.20.
She sells all of them for £1.05 each.
Work out the profit on each one.

$$\text{Cost of each} = £7.20 \div 24 = £0.30$$

$$\text{profit on each} = £1.05 - £0.30 = £0.75$$

£0.75

2 / 2

- 72 Mari earns £1,000 a month and spends £880 a month.
She wants to buy a TV that costs £600.
Can she save enough in 3 months? Show how you decide.

$$\text{Saves } £1000 - £880 = £120 \text{ each month}$$

$$120 \times 3 = 360$$

No: $£120 \times 3 = £360$, which is
less than £600

2 / 2

- 73 The tables show part of a payslip for one month.
Gross pay is basic pay plus overtime. Net pay is gross pay minus total deductions.
Complete the three empty boxes.

Earnings

Item	Amount
Basic pay	£1,650.00
Overtime	£90.00
Gross pay	£1,740.00
Net pay	£1,390.00

Deductions

Item	Amount
Income tax	£179.50
National Insurance	£66.25
Pension	£104.25
Total deductions	£350.00

$$\text{National Insurance} = £350 - £179.50 - £104.25 = £66.25$$

$$\text{Gross pay} = £1,650 + £90 = £1,740$$

$$\text{Net pay} = £1,740 - £350 = £1,390$$

£66.25, £1,740.00, £1,390.00

2 / 2

- 74 The table shows the times Elin worked last week.
She is paid £13 per hour.
Work out how much she earns.

Hours worked

Day	Start	Finish
Monday	11:00	15:30
Wednesday	08:30	13:00
Friday	09:30	16:00

$$\text{Total time} = 15 \text{ hours } 30 \text{ minutes} = 15.5 \text{ hours}$$

$$15.5 \times £13 = £201.50$$

£201.50

2 / 2

- 75 Sam earns £1,000 a month and spends £800 a month.
He wants to buy a laptop that costs £300.
Can he save enough in 2 months? Show how you decide.

$$\text{Saves } £1000 - £800 = £200 \text{ each month}$$

$$200 \times 2 = 400$$

Yes: $£200 \times 2 = £400$, which is more than £300

2 / 2

- 76 The tables show part of a payslip for one month.
Gross pay is basic pay plus overtime. Net pay is gross pay minus total deductions.
Complete the three empty boxes.

Earnings

Item	Amount
Basic pay	£2,550.00
Overtime	£60.00
Gross pay	£2,610.00
Net pay	£2,111.00

Deductions

Item	Amount
Income tax	£292.25
National Insurance	£93.25
Pension	£113.50
Total deductions	£499.00

$$\text{Gross pay} = £2,550 + £60 = £2,610$$

$$\text{Total deductions} = £292.25 + £93.25 + £113.50 = £499$$

$$\text{Net pay} = £2,610 - £499 = £2,111$$

£2,610.00, £499.00, £2,111.00

3 / 3

- 77 The table shows the times Amira worked last week.
She is paid £8.50 per hour.
Work out how much she earns.

Hours worked

Day	Start	Finish
Monday	08:00	13:00
Thursday	08:00	14:30
Friday	09:30	13:00
Saturday	09:30	12:30

$$\text{Total time} = 18 \text{ hours} = 18 \text{ hours}$$

$$18 \times £8.50 = £153$$

£153

3 / 3

- 78 Elin's phone plan costs £20 per month. It includes 100 minutes, 100 texts and 2 GB of data.
Extra minutes cost 8p each, extra texts cost 4p each and extra data costs £2 per GB.
Last month she used 130 minutes, 120 texts and 5 GB of data.
Work out the bill for last month.
You must show your working.

$$\text{Extra minutes} = 30 \times 8p = £2.40$$

$$\text{extra texts} = 20 \times 4p = £0.80$$

$$\text{extra data} = 3 \times £2 = £6$$

$$\text{total} = £20 + £9.20 = £29.20$$

£29.20

3 / 3

- 79 The tables show part of a payslip for one month.
Gross pay is basic pay plus overtime. Net pay is gross pay minus total deductions.
Complete the three empty boxes.

Earnings

Item	Amount
Basic pay	£2,525.00
Overtime	£120.00
Gross pay	£2,645.00
Net pay	£2,148.25

Deductions

Item	Amount
Income tax	£245.25
National Insurance	£178.75
Pension	£72.75
Total deductions	£496.75

$$\text{Overtime} = £2,645 - £2,525 = £120$$

$$\text{Total deductions} = £245.25 + £178.75 + £72.75 = £496.75$$

$$\text{Net pay} = £2,645 - £496.75 = £2,148.25$$

£120.00, £496.75, £2,148.25

3 / 3

- 80 The table shows the times Evan worked last week.
He is paid £14.50 per hour.
Work out how much he earns.

Hours worked

Day	Start	Finish
Tuesday	09:30	14:00
Thursday	08:00	12:30
Friday	10:00	14:30

$$\text{Total time} = 13 \text{ hours } 30 \text{ minutes} = 13.5 \text{ hours}$$

$$13.5 \times £14.50 = £195.75$$

£195.75

3 / 3

- 81 Cereal is sold in two sizes.
Small: 300 g for £2.25.
Large: 600 g for £3.85.
Which size is better value for money? You must show all your working.

$$\text{Small: } 225p \div 300 \times 100 = 75.0p \text{ per } 100 \text{ g}$$

$$\text{large: } 385p \div 600 \times 100 = 64.2p \text{ per } 100 \text{ g}$$

The large size, because it costs less per 100 g

3 / 3

- 82 The tables show part of a payslip for one month.
Gross pay is basic pay plus overtime. Net pay is gross pay minus total deductions.
Complete the three empty boxes.

Earnings

Item	Amount
Basic pay	£1,250.00
Overtime	£75.00
Gross pay	£1,325.00
Net pay	£1,007.50

Deductions

Item	Amount
Income tax	£153.50
National Insurance	£99.75
Pension	£64.25
Total deductions	£317.50

$$\text{Overtime} = £1,325 - £1,250 = £75$$

$$\text{Total deductions} = £153.50 + £99.75 + £64.25 = £317.50$$

$$\text{Net pay} = £1,325 - £317.50 = £1,007.50$$

£75.00, £317.50, £1,007.50

3 / 3

- 83 The table shows a bank statement for Sian's account.
Complete the three empty boxes in the bank statement.

Bank statement

Date	Description	Credit	Debit	Balance
1 Oct	Opening balance			£455.00
3 Oct	Sale of bike	£335.00		£790.00
5 Oct	Train ticket		£275.00	£515.00
9 Oct	Car insurance		£127.50	£387.50
12 Oct	Cash paid in	£145.00		£532.50
14 Oct	Car insurance		£72.50	£460.00

Car insurance

amount: £515 -

£387.50 = £127.50

Cash paid in

balance: £387.50 +

£145 = £532.50

Car insurance

balance: £532.50 -

£72.50 = £460

£127.50, £532.50, £460.00

3 / 3

- 84 Rhian's phone plan costs £25 per month. It includes 100 minutes, 100 texts and 2 GB of data.
Extra minutes cost 10p each, extra texts cost 5p each and extra data costs £2 per GB.
Last month she used 100 minutes, 150 texts and 2 GB of data.
Work out the bill for last month.
You must show your working.

$$\text{Extra minutes} = 0 \times 10p = £0$$

$$\text{extra texts} = 50 \times 5p = £2.50$$

$$\text{extra data} = 0 \times £2 = £0$$

$$\text{total} = £25 + £2.50 = £27.50$$

£27.50

3 / 3

85 Pasta is sold in two sizes.

Small: 250 g for £1.90.

Large: 500 g for £3.70.

Which size is better value for money? You must show all your working.

$$\text{Small: } 190p \div 250 \times 100 = 76.0p \text{ per } 100 \text{ g}$$

$$\text{large: } 370p \div 500 \times 100 = 74.0p \text{ per } 100 \text{ g}$$

The large size, because it costs less per 100 g

3 / 3

86 The table shows a bank statement for Sian's account.
Complete the three empty boxes in the bank statement.

Bank statement

Date	Description	Credit	Debit	Balance
1 Jun	Opening balance			£845.00
4 Jun	Gift	£240.00		£1,085.00
6 Jun	Clothes		£195.00	£890.00
9 Jun	Car insurance		£260.00	£630.00
14 Jun	Benefit payment	£185.00		£815.00
17 Jun	Electricity		£15.00	£800.00

Clothes amount:

$$£1,085 - £890 = £195$$

Car insurance

$$\text{balance: } £890 - £260 = £630$$

Electricity balance:

$$£815 - £15 = £800$$

£195.00, £630.00, £800.00

3 / 3

87 Elin works 36 hours at the basic rate of £14.40 per hour.
She then works 10 hours overtime.
Overtime is paid at time and a half (1.5 times the basic rate).
Work out her total pay.
You must show your working.

$$\text{Basic} = 36 \times £14.40 = £518.40$$

$$\text{overtime rate} = 1.5 \times £14.40 = £21.60$$

$$\text{overtime} = 10 \times £21.60 = £216$$

$$\text{total} = £734.40$$

£734.40

3 / 3

88 Orange juice is sold in two sizes.

Small: 250 ml for £1.05.

Large: 500 ml for £2.25.

Which size is better value for money? You must show all your working.

Small: $105p \div 250 \times 100 = 42.0p$ per 100 ml

large: $225p \div 500 \times 100 = 45.0p$ per 100 ml

The small size, because it costs less per 100 ml

3 / 3

89 The table shows a bank statement for Sian's account.

Complete the three empty boxes in the bank statement.

Bank statement

Date	Description	Credit	Debit	Balance
1 Mar	Opening balance			£825.00
8 Mar	Wages	£150.00		£975.00
12 Mar	Sale of bike	<i>£380.00</i>		£1,355.00
18 Mar	Benefit payment	£350.00		<i>£1,705.00</i>
21 Mar	Sale of bike	£25.00		<i>£1,730.00</i>
26 Mar	Rent		£232.50	£1,497.50

*Sale of bike
amount: £1,355 -
£975 = £380
Benefit payment
balance: £1,355 +
£350 = £1,705
Sale of bike
balance: £1,705 +
£25 = £1,730*

£380.00, £1,705.00, £1,730.00

3 / 3

90 Carys's phone plan costs £25 per month. It includes 200 minutes, 200 texts and 4 GB of data.

Extra minutes cost 10p each, extra texts cost 5p each and extra data costs £2 per GB.

Last month she used 200 minutes, 250 texts and 5 GB of data.

Work out the bill for last month.

You must show your working.

Extra minutes = $0 \times 10p = £0$

extra texts = $50 \times 5p = £2.50$

extra data = $1 \times £2 = £2$

total = $£25 + £4.50 = £29.50$

£29.50

3 / 3

- 91 Coffee is sold in two sizes.

Small: 500 g for £1.05.

Large: 1000 g for £2.30.

Which size is better value for money? You must show all your working.

Small: $105p \div 500 \times 100 = 21.0p$ per 100 g

large: $230p \div 1000 \times 100 = 23.0p$ per 100 g

The small size, because it costs less per 100 g

3 / 3

- 92 The table shows two meter readings, in kWh, for an electricity meter over 31 days.

Electricity costs 28p per kWh.

The standing charge is 45p per day.

Work out the total bill.

You must show your working.

Electricity meter readings (kWh)

Previous reading	Present reading
27,545	28,175

Units = $28,175 - 27,545 = 630$

cost = $630 \times 28p = £176.40$

standing charge = $31 \times 45p = £13.95$

total = $£190.35$

£190.35

3 / 3

- 93 Huw's phone plan costs £12 per month. It includes 200 minutes, 200 texts and 4 GB of data.

Extra minutes cost 8p each, extra texts cost 4p each and extra data costs £2 per GB.

Last month he used 220 minutes, 220 texts and 7 GB of data.

Work out the bill for last month.

You must show your working.

Extra minutes = $20 \times 8p = £1.60$

extra texts = $20 \times 4p = £0.80$

extra data = $3 \times £2 = £6$

total = $£12 + £8.40 = £20.40$

£20.40

3 / 3

94 Cereal is sold in two sizes.

Small: 400 g for £0.80.

Large: 1500 g for £3.50.

Which size is better value for money? You must show all your working.

Small: $80p \div 400 \times 100 = 20.0p$ per 100 g

large: $350p \div 1500 \times 100 = 23.3p$ per 100 g

*The small size, because it costs
less per 100 g*

3 / 3

95 Yoghurts cost £1.20 each in a shop.

Shop A has the offer: 3 for the price of 2.

Shop B has the offer: 40% off the price.

Jon wants to buy 6 yoghurts. Which shop is cheaper, and by how much?

Shop A: $4 \times £1.20 = £4.80$

*shop B: $6 \times £1.20 = £7.20$, then 40% off =
£4.32*

Shop B is cheaper by £0.48

3 / 3

96 Amira uses 800 kWh of electricity in three months (September to November).

Electricity costs 28p per kWh.

The standing charge is £10 per month.

VAT of 20% is added to the cost of electricity and the standing charge.

Work out the total bill, including VAT.

You must show your working.

Electricity = $800 \times 28p = £224$

standing charge = $3 \times £10 = £30$

sub-total = £254

VAT = 20% of £254 = £50.80

total = £304.80

£304.80

3 / 3

- 97 Bars of chocolate cost £0.80 each in a shop.
Shop A has the offer: 3 for the price of 2.
Shop B has the offer: 20% off the price.
Jon wants to buy 9 bars of chocolate. Which shop is cheaper, and by how much?

$$\text{Shop A: } 6 \times £0.80 = £4.80$$

$$\text{shop B: } 9 \times £0.80 = £7.20, \text{ then } 20\% \text{ off} = £5.76$$

Shop A is cheaper by £0.96

3 / 3

- 98 Aled uses 850 kWh of electricity in one month.
Electricity costs 29p per kWh.
The standing charge is £15 per month.
VAT of 5% is added to the cost of electricity and the standing charge.
Work out the total bill, including VAT.
You must show your working.

$$\text{Electricity} = 850 \times 29p = £246.50$$

$$\text{standing charge} = 1 \times £15 = £15$$

$$\text{sub-total} = £261.50$$

$$\text{VAT} = 5\% \text{ of } £261.50 = £13.08$$

$$\text{total} = £274.58$$

£274.58

3 / 3

- 99 Cerys uses 720 kWh of electricity in three months (September to November).
Electricity costs 26p per kWh.
The standing charge is £16 per month.
VAT of 5% is added to the cost of electricity and the standing charge.
Work out the total bill, including VAT.
You must show your working.

$$\text{Electricity} = 720 \times 26p = £187.20$$

$$\text{standing charge} = 3 \times £16 = £48$$

$$\text{sub-total} = £235.20$$

$$\text{VAT} = 5\% \text{ of } £235.20 = £11.76$$

$$\text{total} = £246.96$$

£246.96

3 / 3

100 Elin uses 560 kWh of electricity in two months.

Electricity costs 28p per kWh.

The standing charge is £14 per month.

VAT of 20% is added to the cost of electricity and the standing charge.

Work out the total bill, including VAT.

You must show your working.

$$\text{Electricity} = 560 \times 28\text{p} = \pounds 156.80$$

$$\text{standing charge} = 2 \times \pounds 14 = \pounds 28$$

$$\text{sub-total} = \pounds 184.80$$

$$\text{VAT} = 20\% \text{ of } \pounds 184.80 = \pounds 36.96$$

$$\text{total} = \pounds 221.76$$

.....
 $\pounds 221.76$

3 / 3