

Multi-step problems

Show all working out for each problem in your maths book

Q1.

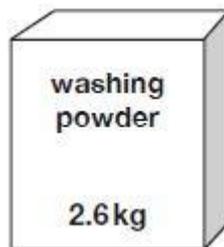
A book has 276 pages.

Amina has read $\frac{1}{3}$ of the book.

How many pages are **left** for Amina to read?

Q2.

A box contains 2.6 kg of washing powder.



Jack uses 65 grams of powder for each wash.

He uses all the powder.

How many washes did Jack do?

Q3.

Jamie takes three parcels to be posted.

One parcel has a mass of 750 g

Another weighs 2.8 kg

The total mass of the three parcels is 5.13 kg

What is the mass of the third parcel?

Q4.

200 children went on holiday.

10% of the children went to Wales.

25% of the children went to Scotland.

How many **more** children went to Scotland than went to Wales?

Q5.

A shop sells jars of honey and honey dippers.



Chen bought **three** jars of honey and a dipper.

The total cost was £5.40

The dipper cost 75p.

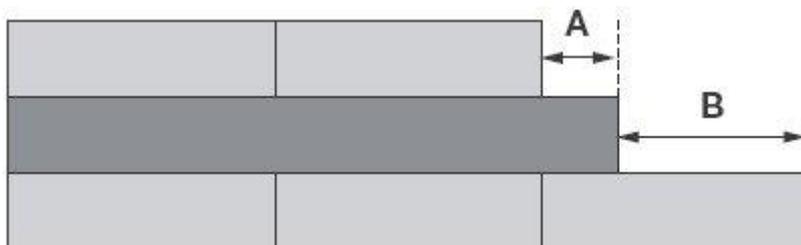
How much did each jar of honey cost?

Q6.

Liam has two different sizes of rectangle.



He makes this pattern with them.



Not actual size

Calculate the lengths of **A** and **B**.

Q7.

Seb saved up for a new skateboard that cost £40

The table shows how much money he saved each week.

Week number	1	2	3	4	5	6	7	8	9	10
Amount saved	£5	£4	£2	£4	£3	£4	£6	£4	£3	£5

In which week did Seb reach **half** the amount he needed for the skateboard?

Week

If Seb had saved an extra £1 each week, in which week would he have reached his target of £40?

Week

Q8.

Olivia buys three packets of nuts.



She pays with a **£2 coin**.

This is her change.



What is the cost of **one** packet of nuts?

Q9.

Large pizzas cost £8.50 each.

Small pizzas cost £6.75 each.

Five children together buy one large pizza and three small pizzas.

They share the cost equally.

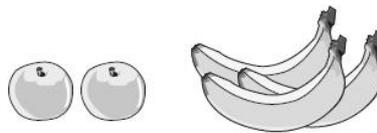
How much does each child pay?

Q10.

A shop sells fruit.

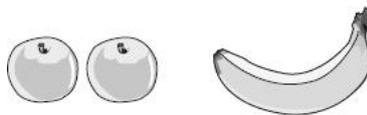
Chen buys 2 apples and 3 bananas.

He pays £2.35



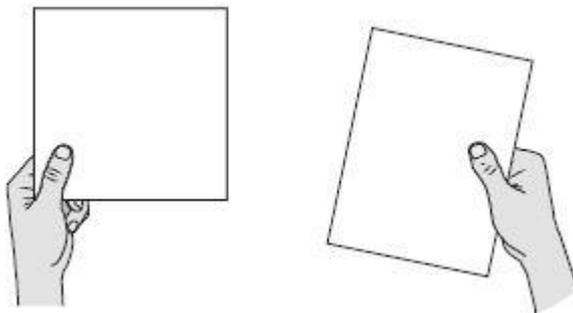
Megan buys 2 apples and 1 banana.

She pays £1.25



How much does **one** banana cost?

Q11.



A square tile measures 20 cm by 20 cm.

A rectangular tile is 3 cm **longer** and 2 cm **narrower** than the square tile.

What is the **difference in area** between the two tiles?

Mark schemes

Q1.

Award **TWO** marks for the correct answer of 184

If the answer is incorrect, award **ONE** mark for:

- sight of 92

OR

- evidence of appropriate method, e.g.

- $\overset{1}{3} \times 276 = 92$
- $92 \times 2 =$
- $276 \div 3 = 92$
- $276 - 92 =$

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2 marks

[2]

Q2.

Award **TWO** marks for the correct answer of 40

If the answer is incorrect, award **ONE** mark for evidence of appropriate method, e.g.

- $2.6 \times 1,000 = 2,600$
- $2,600 \div 65 =$
- $2.6 \div 0.065 =$

*Answer need not be obtained for the award of **ONE** mark.*

***Do not** accept an incorrect conversion or no conversion of units, e.g.*

- $260 \div 65 =$
- $2.6 \text{ kg} \div 65 \text{ g}$

Up to 2m

[2]

Q3.

Award **TWO** marks for the correct answer of 1.58 kilograms

If the answer is incorrect award **ONE** mark for evidence of appropriate working, e.g.

$$750 \text{ g} = 0.75 \text{ kg}$$

$$2.8 + 0.75 = 3.55$$

$$5.13 - 3.55 = \frac{7}{20}$$

[2]

Q4.

Award **TWO** marks for a correct answer of 30

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg:

- 10% of 200 = 20
- 25% of 200 = 50
- 50 – 20 = wrong answer

OR

- 25% – 10% = 15%
- 15% of 200 = wrong answer

*Working must be carried through to reach an answer for the award of **ONE** mark.*

Up to 2m

[2]

Q5.

Award **TWO** marks for the correct answer of £1.55

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, eg

$$£5.40 - £0.75 = £4.65$$

$$£4.65 \div 3$$

*Accept for **ONE** mark £155 **OR** £155p **OR** 1.55p as evidence of an appropriate method.*

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2

[2]

Q6.

(a) 5

1

(b) 15

If the answer is incorrect, award the mark if the answers to (a) and (b) total 20

U1

[2]

Q7.

6

1

8

1

Q8.

Award **TWO** marks for the correct answer of 35p **OR** £0.35.

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- $50p + 20p + 10p + 10p + 5p = 95p$
 $£2.00 - 95p = £1.05$
 $£1.05 \div 3$

*Accept for **ONE** mark an answer of £35 **OR** £35p **OR** 0.35p as evidence of an appropriate method.*

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2m

Q9.

Award **TWO** marks for the correct answer of £5.75

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g:

- $£6.75 \times 3 = £20.25$
 $£20.25 + £8.50 = £28.75$
 $£28.75 \div 5$

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2

Q10.

Award **TWO** marks for the correct answer of 55p **OR** £0.55

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg

- $£2.35 - £1.25 = £1.10$

$£1.10 \div 2 =$ wrong answer

*Accept for **ONE** mark £55 **OR** £55p **OR** 0.55p as evidence of appropriate working.*

*Working must be carried through to reach an answer for the award of **ONE** mark.*

Up to 2
U1**Q11.**

Award **THREE** marks for the correct answer of 14

If the answer is incorrect, award **TWO** marks for:

- sight of 414 as evidence of 23×18 completed correctly

OR

- evidence of an appropriate method with no more than one arithmetic error, e.g.

$$20 \times 20 = 400$$

$$\begin{array}{r} 23 \\ \times 18 \\ \hline 230 \\ 184 \\ \hline 314 \text{ (error)} \end{array}$$

$$400 - 314 = 86$$

Award **ONE** mark for evidence of an appropriate method.

*Answer need not be obtained for the award of **ONE** mark.*

A misread of a number may affect the award of marks. No marks are awarded if there is more than one misread or if the mathematics is simplified.

***TWO** marks will be awarded for an appropriate method using the misread number followed through correctly to a final answer.*

***ONE** mark will be awarded for evidence of an appropriate method using the misread number followed through correctly with no more than one arithmetic error.*

Up to 3m

[3]