Q1.

Layla makes jewellery to sell at a school fair.

Each bracelet has **53** beads.

She makes **68** bracelets.

Each necklace has **105** beads.

She makes **34** necklaces.

How many beads does Layla use **altogether?**

Show your method

beads

3 marks

Q2.

Circle two numbers that multiply together to equal **1 million**.

200   2,000   5,000   50,000

1 mark

Q3.

Write the two missing digits to make this **long multiplication** correct.

$$
\begin{array}{cccc}
 & & 4 & \boxed{} \\
\times & & \boxed{} & 6 \\
\hline
 & 2 & 4 & 6 \\
 & 8 & 2 & 0 \\
\hline
1 & 0 & 6 & 6 \\
\end{array}
$$

2 marks

Q4.
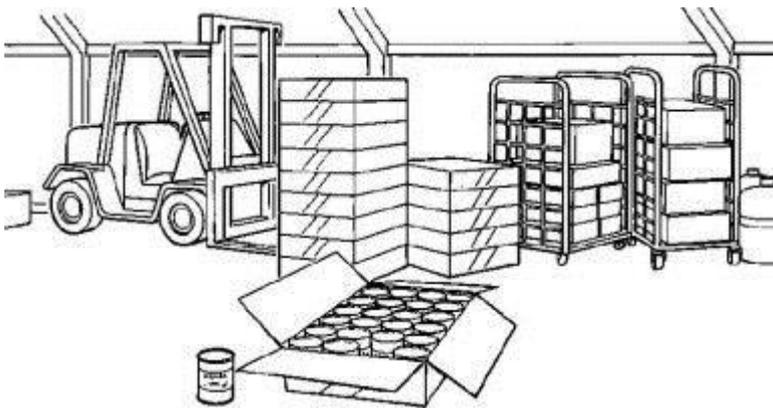
In a supermarket storeroom there are

    7 boxes of tomato soup

    5 boxes of pea soup

    4 boxes of chicken soup

There are **24 tins** in every **box**.

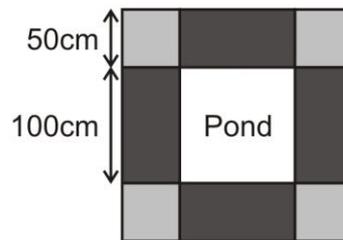How many **tins** of soup are there **altogether**?

2 marks

Q5.

Mr Singh buys paving slabs to go around his pond.

PAVING SLABS

£1.95 each   Square slabs
50cm by 50cm

£3.50 each   Rectangular slabs
100cm by 50cm

50cm

100cm   Pond

He buys 4 rectangular slabs and 4 square slabs.

What is the total cost of the slabs he buys?
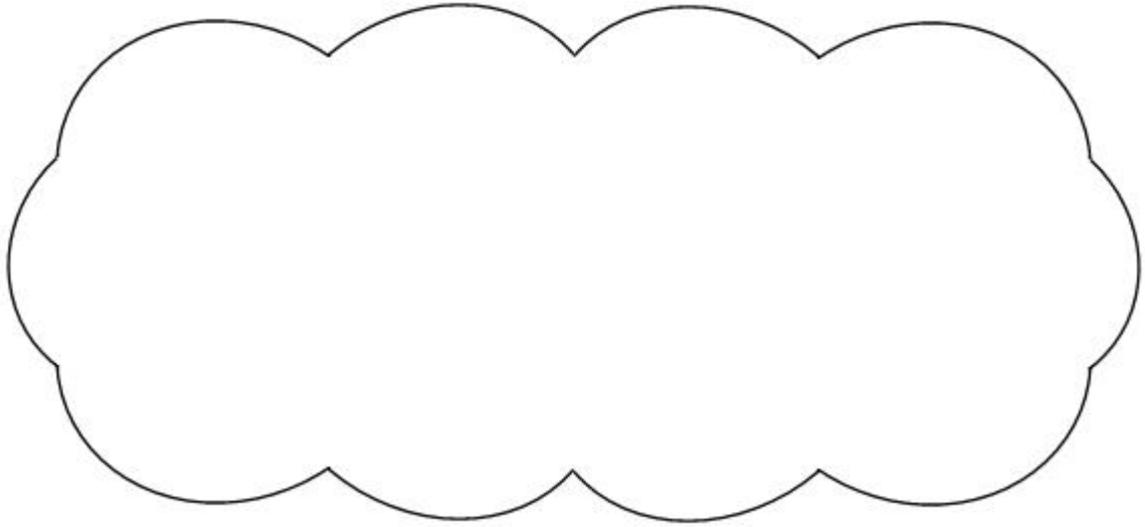
£

2 marks

Mr Singh says,

'It would cost more to use square slabs all the way round'.

Explain why he is correct.

1 mark

Mark schemes

Q1.

Award **THREE** marks for the correct answer of 7,174

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

- evidence of an appropriate complete method which contains no more than **ONE** arithmetic error, e.g.

$$
\begin{array}{r}
53 \\
\times\ \ 68 \\
\hline
3504 \ \textit{(error)}
\end{array}
\qquad
\begin{array}{r}
105 \\
\times\ \ 34 \\
\hline
3570
\end{array}
$$

3,504 + 3,570 = 7,074

Award **ONE** mark for:

- evidence of an appropriate method with more than **ONE** arithmetic error.

OR

- sight of 3,604 as evidence of long multiplication step (68 × 53) completed correctly.

OR

- sight of 3,570 as evidence of long multiplication step (105 × 34) completed correctly.

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

Up to 3m

[3]

Q2.

Numbers circled as shown:

(200)   2,000   (5,000)   50,000

> *Accept alternative unambiguous positive indications, e.g. numbers ticked or underlined.*

[1]

Q3.

Award **TWO** marks for both digits correct, as shown:

```
      4 1
  ×   2 6
    2 4 6
    8 2 0
  1 0 6 6
```

If the answer is incorrect, award **ONE** mark for one digit correct.

Up to 2

[2]

Q4.

Award **TWO** marks for the correct answer of 384

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

$7 + 5 + 4 = 16$

16×24

OR

7×24

5×24

$\underline{+\ 4 \times 24}$

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

Up to 2

[2]

Q5.

(a)   Award **TWO** marks for the correct answer of £21.80
*Accept £21.80p **OR** £21 80*

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

$3.50 \times 4 = 14.00$

$1.95 \times 4 = 7.80$

$14.00 + 7.80$ = wrong answer

*Accept for **ONE** mark £2180p **OR** £2180 **OR** £21.8 as evidence of appropriate working.*
*Calculation must be performed for the award of **ONE** mark.*

Up to 2

(b)   An explanation which recognises that each square slab costs more than half a rectangular slab or equivalent, eg

• 'Half of £3.50 is £1.75, which is less than £1.95';

• 'Two square slabs cost more than one rectangular slab';

- 'Because 12 squares cost £23.40';

- 'Because it would cost £1.60 more'.

    Do not *accept vague or arbitrary explanations, eg*

    - *'Because he would need more slabs';*

    - *'Because square slabs are cheaper than rectangular slabs';*

    - *'Because it costs more';*

    - *'He is right because the square slabs are £1.95 each and the*

        rectangular slabs are £3.50 each'.

1

[3]