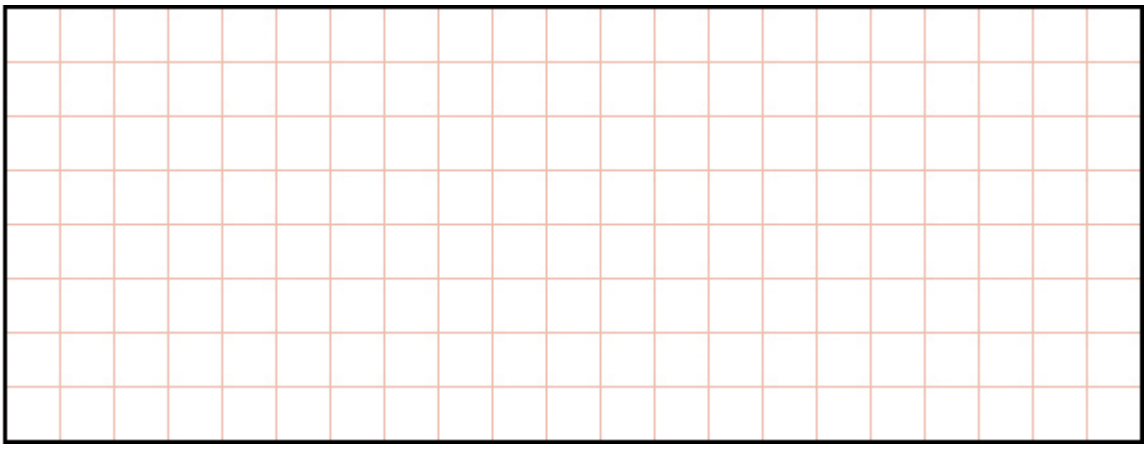
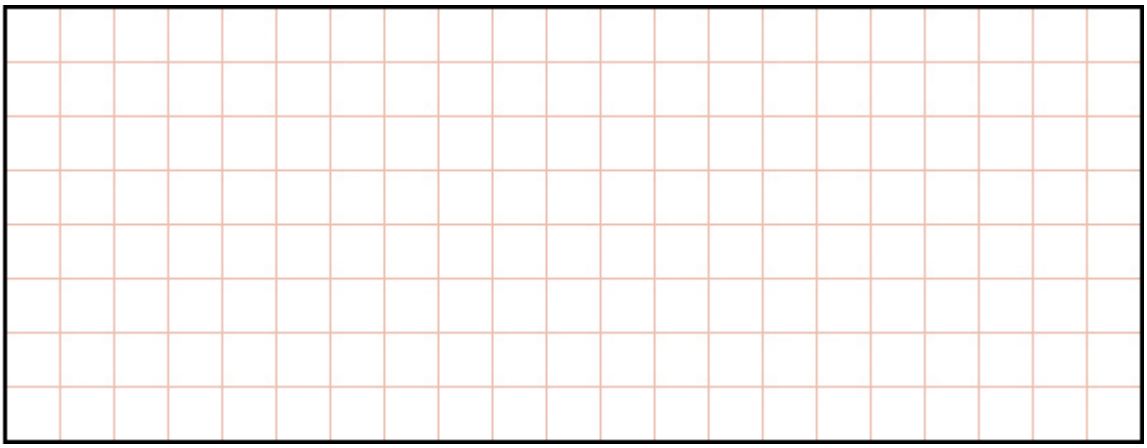
1. 876 + 543 − 198 =



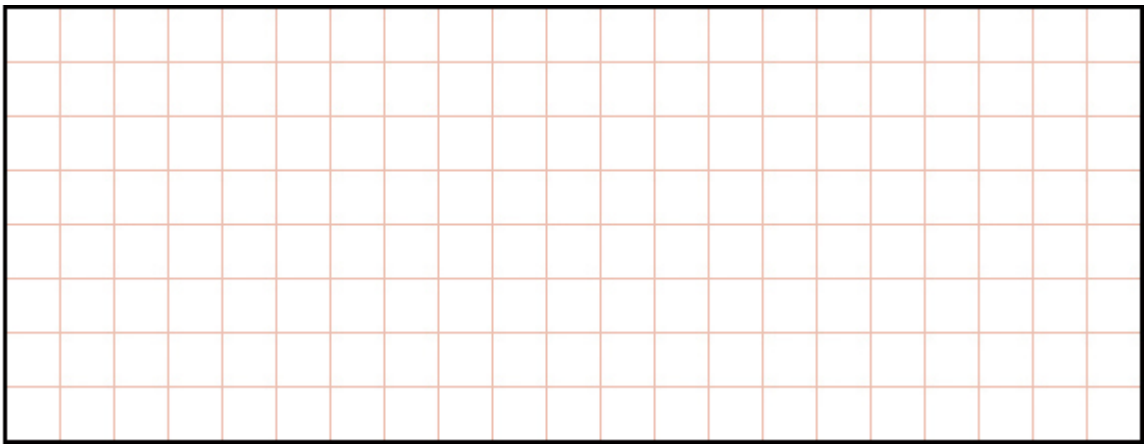
1 mark

2. 37.8 − 14.671 =



1 mark

3. 15.4 − 8.88 =

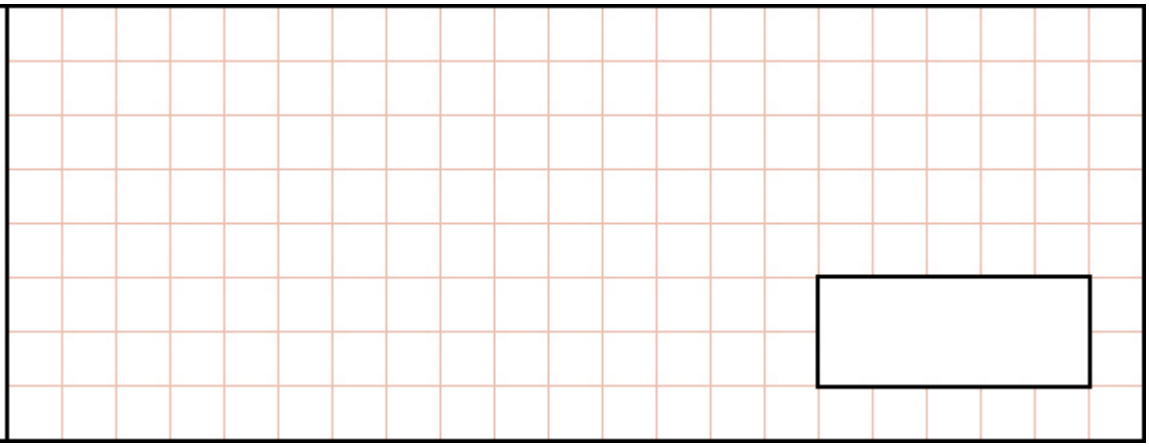


1 mark

4.

$$\begin{array}{r} 5413 \\ \times \quad 86 \\ \hline \end{array}$$

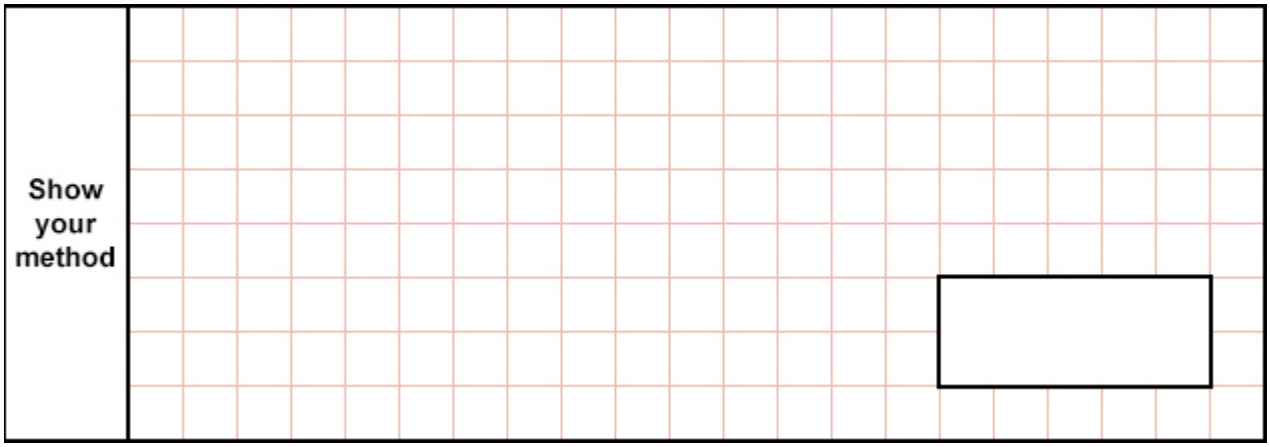
Show your method



2 marks

5.

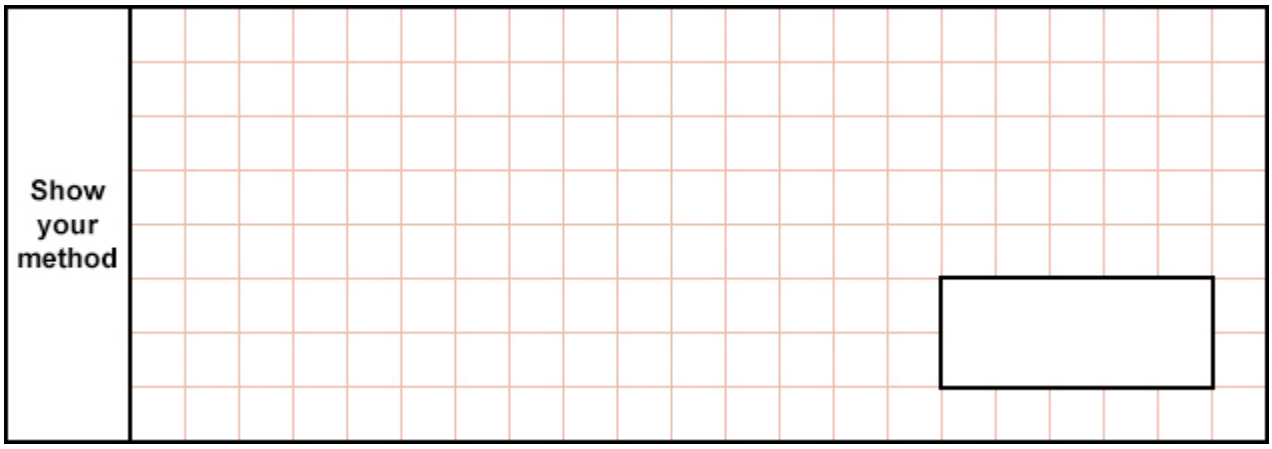
$$\begin{array}{r} 1757 \\ \times\ 49 \\ \hline \end{array}$$



2 marks

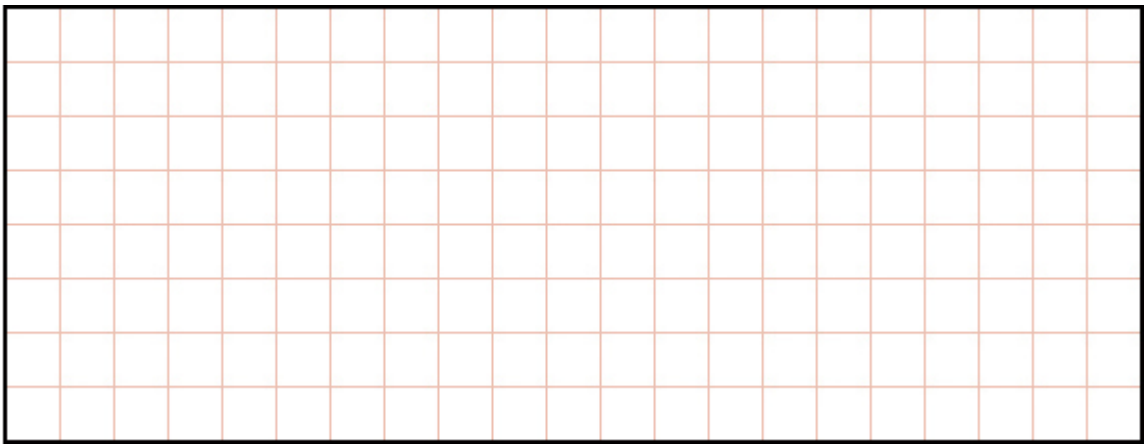
6.

$$\begin{array}{r} 4781 \\ \times\ 23 \\ \hline \end{array}$$



2 marks

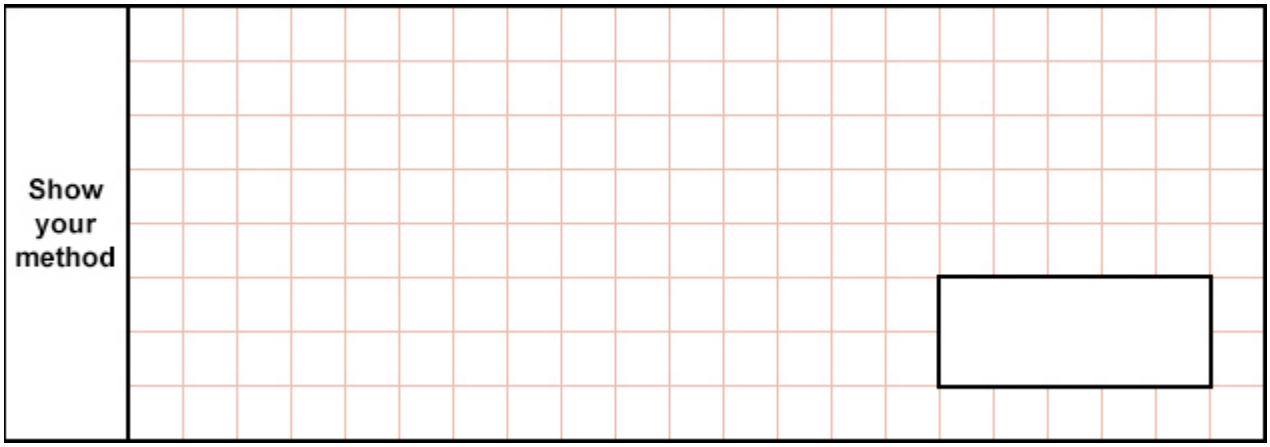
7. $0.9 \times 200 =$ ☐



1 mark

8. $8\,3\overline{)8\,0\,5\,1}$

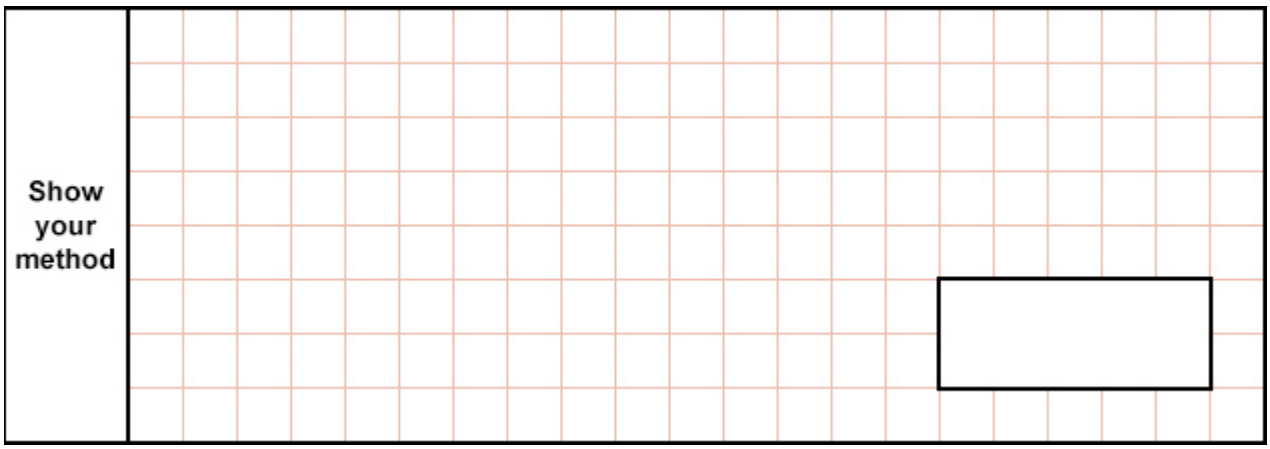
Show your method



2 marks

9. $13\overline{)3016}$

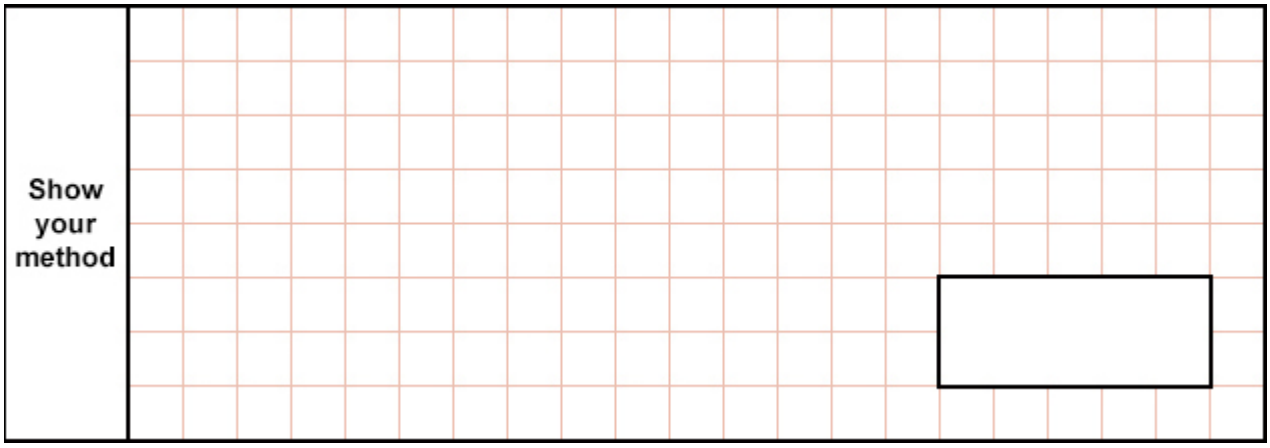
Show your method



2 marks

10. $24\overline{)672}$

Show your method



2 marks

Mark schemes

1. 1221

[1]

2. 23.129

[1]

3. 6.52

[1]

4. Award **TWO** marks for the correct answer of 465,518

If the answer is incorrect, award **ONE** mark for the formal method of long multiplication with no more than **ONE** arithmetic error, e.g.

-

$$\begin{array}{r} 5413 \\ \times \quad 86 \\ \hline 32478 \\ 433040 \\ \hline 465438 \end{array}$$ *(error)*

OR

-

$$\begin{array}{r} 5413 \\ \times \quad 86 \\ \hline 32478 \\ 423040 \\ \hline 455518 \end{array}$$ *(error)*

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

***Do not** award any marks if the error is in the place value, e.g. the omission of the zero when multiplying by tens:*

$$\begin{array}{r} 5413 \\ \times \quad 86 \\ \hline 32478 \\ 43304 \\ \hline 75782 \end{array}$$ *(place value error)*

Up to 2m

[2]

5. For 2 marks: 86 093

For 1 mark:

```
  1757
×   49
70280
15813
86093
```

An error in one row, then added correctly, or an error in the addition

[2]

6. Award **TWO** marks for the correct answer of 109,963

If the answer is incorrect, award **ONE** mark for a formal method of long multiplication with no more than **ONE** arithmetical error, e.g.

-
```
  4781
×   23
14343
95620
209963 (error)
```

OR

-
```
  4781
×   23
14343
95630 (error)
109973
```

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

***Do not** award any marks if the error is in the place value, e.g. the omission of the zero when multiplying by tens:*

```
 4781
×  23
14343
 9562 (place value error)
23905
```

Up to 2m

[2]

7. 180

[1]

8. Award **TWO** marks for the correct answer of 97

If the answer is incorrect, award **ONE** mark for the formal methods of division with no more than **ONE** arithmetic error, i.e.

- long division algorithm, e.g.

```
      96 r82
83 | 8051
   - 7470
     580   (error)
   -  498
      82
```

OR

```
      47   (error)
83 | 8051
   - 4150      50 × 83
     3901
   - 3320      40 × 83
      581
    581       7 × 83
      0
```

- short division algorithm, e.g.

```
      9  6 r73
83 | 805 57 1      (error)
```

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

*Short division methods **must** be supported by evidence of appropriate carrying figures to indicate the use of a division algorithm, and be a complete method. The carrying figure **must** be less than the divisor.*

Up to 2m

[2]

9. Award **TWO** marks for the correct answer of 232.

If the answer is incorrect, award **ONE** mark for the formal methods of division which contains no more than **ONE** arithmetical error, e.g:

- long division algorithm

  wrong answer

$$
\begin{array}{r|l}
13 & 3016 \\
 & \underline{26} \\
 & 41 \\
- & \underline{39} \\
 & 26 \\
- & \underline{26} \\
 & 0
\end{array}
$$

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

***Do not** award any marks if the final (answer) line of digits is missing.*

- short division algorithm

  wrong answer

$$13\overline{)3\,0^{4}1^{2}6}$$

Short division methods must be supported by evidence of appropriate carrying figures to indicate the use of a division algorithm, and be a complete method.

Commentary: Two marks are awarded for the correct answer. However, if the answer is incorrect, one mark can only be awarded if the pupil has used one of the formal methods of long or short division. An appropriate carrying figure in short division must be less than 13 in this instance.

Up to 2

[2]

10. For 2 marks:

28

For 1 mark:

Evidence of either a long division method or short division method with only one error (carry figures must be seen in a short division method)

Up to 2

[2]