

Q1.

$$\boxed{} = 8,275 + 82$$

1 mark

Q2.

$$\boxed{} = 6,000 + 90$$

1 mark

Q3.

$$826 = 800 + \boxed{} + 6$$

1 mark

Q4.

$$3,050,020 = 3,000,000 + \boxed{} + 20$$

1 mark

Q5.

$$\begin{array}{r} 785 \\ 23 \\ \times \\ \hline \end{array}$$

Show
your
method

2 marks

Q6.

$$5,400 \div 9 =$$

1 mark

Q7.

$$10 - 5.4 =$$

1 mark

Q8.

$$0.1 \div 100 =$$

1 mark

Q9.

$$2 \times 45 =$$

1 mark

Q10.

$$\boxed{} - 10 = 298$$

1 mark

Q11.

$$7,064 - 502 =$$

1 mark

Q12.

$$\boxed{} = 5,776 - 855$$

1 mark

Q13.

$$56.38 + 24.7 =$$

1 mark

Q14.

$$\begin{array}{r} 3468 \\ \times 62 \\ \hline \end{array}$$

Show
your
method

2 marks

Q15.

$$5 \times 4 \times 10 =$$

1 mark

Q16.

$$83 \overline{) 8051}$$

Show
your
method

2 marks

Q17.

$$39 + 673 =$$

1 mark

Q18.

$$0.9 \div 100 =$$

1 mark

Q19.

$$60 \div (30 - 24) =$$

1 mark

Q20.

$$\begin{array}{r} 836 \\ \times 27 \\ \hline \end{array}$$

[illegible]

2 marks

Q21.

3 7 | 8 8 8

Show
your
method

A large grid of 20 columns and 10 rows for showing work. A smaller empty rectangular box is located in the bottom right corner of the grid.

2 marks

Mark schemes

Q1.

8,357

[1]

Q2.

6,090

[1]

Q3.

20

[1]

Q4.

50,000

[1]

Q5.

Award **TWO** marks for the correct answer of 18,055

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

•

$$\begin{array}{r} 785 \\ \times 23 \\ \hline 2355 \\ 15700 \\ \hline 18155 \text{ (error)} \end{array}$$

OR

•

$$\begin{array}{r} 785 \\ \times 23 \\ \hline 2345 \text{ (error)} \\ 15700 \\ \hline 18045 \end{array}$$

*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:*

$$\begin{array}{r}
 785 \\
 \times 23 \\
 \hline
 2355 \\
 1570 \text{ (place value error)} \\
 \hline
 3925
 \end{array}$$

Up to 2m

[2]

Q6.

600

[1]

Q7.

4.6

[1]

Q8.

0.001

Accept equivalent fractions, e.g.

$$\frac{1}{1000}$$

[1]

Q9.

90

[1]

Q10.

308

[1]

Q11.

6,562

[1]

Q12.

4,921

[1]

Q13.

81.08

[1]

Q14.

Award **TWO** marks for the correct answer of 215,016

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

$$\begin{array}{r} \cdot \quad 3468 \\ \times \quad 62 \\ \hline 6936 \\ 208080 \\ \hline 214016 \text{ (error)} \end{array}$$

OR

$$\begin{array}{r} \cdot \quad 3468 \\ \times \quad 62 \\ \hline 6934 \text{ (error)} \\ 208080 \\ \hline 215014 \end{array}$$

*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:

$$\begin{array}{r} 3468 \\ \times \quad 62 \\ \hline 6936 \\ 20808 \text{ (place value error)} \\ \hline 27744 \end{array}$$

Up to 2m

[2]

Q15.

200

[1]

Q16.

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.

$$\begin{array}{r} 96 \text{ r}82 \\ 83 \overline{) 8051} \\ \underline{- 7470} \\ 580 \text{ (error)} \\ \underline{- 498} \\ 82 \end{array}$$

OR

$$\begin{array}{r}
 47 \text{ (error)} \\
 83 \overline{) 8051} \\
 \underline{- 4150} \quad 50 \times 83 \\
 3901 \\
 \underline{- 3320} \quad 40 \times 83 \\
 581 \\
 \underline{- 581} \quad 7 \times 83 \\
 0
 \end{array}$$

- short division algorithm, e.g.

$$\begin{array}{r}
 9 \text{ } 6 \text{ r}73 \\
 83 \overline{) 805^{57} 1} \text{ (error)}
 \end{array}$$

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]

Q17.

712

[1]

Q18.

0.009

[1]

Q19.

10

[1]

Q20.

Award **TWO** marks for the correct answer of 22,572

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

$$\begin{array}{r}
 \bullet \quad \begin{array}{r} 836 \\ \times \quad 27 \\ \hline 5852 \\ 16720 \\ \hline 22602 \end{array} \text{ (error)}
 \end{array}$$

OR

$$\bullet \quad \begin{array}{r} 836 \\ \times \quad 27 \\ \hline \end{array}$$

$$\begin{array}{r} 5612 \text{ (error)} \\ 16720 \\ \hline 22332 \end{array}$$

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:

$$\begin{array}{r} 836 \\ \times 27 \\ \hline 5852 \\ \underline{1672} \text{ (place value error)} \\ 7524 \end{array}$$

Up to 2m

[2]

Q21.

Award **TWO** marks for the correct answer of 24

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.

$$\begin{array}{r} 23 \text{ r}29 \\ 37 \overline{) 888} \\ \underline{- 740} \\ 140 \text{ (error)} \\ \underline{- 111} \\ 29 \end{array}$$

OR

$$\begin{array}{r} 42 \text{ (error)} \\ 37 \overline{) 888} \\ \underline{- 740} \\ 148 \\ \underline{- 148} \\ 0 \end{array} \quad \begin{array}{l} 20 \times 37 \\ 4 \times 37 \end{array}$$

- short division algorithm, e.g.

$$\begin{array}{r} 23 \text{ r}27 \text{ (error)} \\ 37 \overline{) 888} \end{array}$$

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]