

## Mark scheme - Multiplication

**Q1.** 253.4

[1]

**Q2.** 1,200

[1]

**Q3.** Award **TWO** marks for the correct answer of 3,266

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

e.g.

$$\begin{array}{r} \cdot \quad 71 \\ \times \quad 46 \\ \hline 426 \\ 2840 \\ \hline 3260 \text{ (error)} \end{array}$$

**OR**

$$\begin{array}{r} \cdot \quad 71 \\ \times \quad 46 \\ \hline 426 \\ 2440 \text{ (error)} \\ \hline 2866 \end{array}$$

*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:

$$\begin{array}{r} 71 \\ \times \quad 46 \\ \hline 426 \\ 284 \text{ (place value error)} \\ \hline 710 \end{array}$$

Up to 2m

[2]

**Q4.** 128

[1]

**Q5.** 120

[1]

**Q6.**

$$\frac{1}{6}$$

[1]

**Q7.** 56

[1]

**Q8.** 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.

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

**OR**

$$\begin{array}{r} \cdot \\ \times \quad 836 \\ \quad \underline{27} \\ \quad 5612 \text{ (error)} \\ \underline{16720} \\ 22332 \end{array}$$

*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:*

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

Up to 2m

[2]

**Q9.** 12

**Commentary:** Pupils are expected to use their knowledge of the order of operations to carry out calculations involving the four operations (6C9) in this case to evaluate  $4 \times 2$  first and then to subtract that product from 20.

[1]

**Q10.** 34800

[1]

**Q11.** 630,000

[1]

**Q12.** 310

[1]

**Q13.** 107.4

[1]

**Q14.** Award **TWO** marks for the correct answer of 36,612.

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

• 
$$\begin{array}{r} 678 \\ \times \quad 54 \\ \hline 33900 \\ \quad 2712 \\ \hline \end{array}$$
  
wrong answer

**Do not** award any marks if:

- the error is in the place value, e.g. the omission of the zero when multiplying by tens, i.e:

$$\begin{array}{r} 678 \\ \times \quad 54 \\ \hline 3390 \\ \quad 2712 \\ \hline \end{array}$$

wrong answer

- the final (answer) line of digits is missing.  
Working must be carried through to reach an answer for the award of **ONE** mark.

Up to 2

[2]

**Q15.**

$$\begin{array}{r} 2 \\ - \\ 5 \end{array}$$

Accept equivalent fractions or an **exact** decimal equivalent,

$$\frac{12}{30}$$

e.g.  $\frac{12}{30}$  or 0.4

[1]

**Q16.** 91.5

[1]

**Q17.** 445.2

[1]

**Q18.**

Award **TWO** marks for the correct answer of 19,228

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

• 
$$\begin{array}{r} 418 \\ \times \quad 46 \\ \hline 2508 \\ \quad 16720 \\ \hline 18228 \text{ (error)} \end{array}$$

OR

$$\begin{array}{r} \cdot \quad 418 \\ \times \quad 46 \\ \hline 2508 \\ 16620 \text{ (error)} \\ \hline 19128 \end{array}$$

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:

$$\begin{array}{r} \cdot \quad 418 \\ \times \quad 46 \\ \hline 2508 \\ 1672 \text{ (place value error)} \\ \hline 4180 \end{array}$$

Up to 2m

[2]

**Q19.** 20

[1]

**Q20.**

$$17\frac{1}{2}$$

OR

$$\frac{70}{4} \text{ OR } \frac{35}{2}$$

Accept equivalent mixed numbers, fractions or an **exact** decimal equivalent, e.g. 1.75

[1]