## Methods for Multiplication and Division Homework

1. Below are six short multiplication problems.
i. Use rounding to estimate the answer to each one.
ii. Use either the grid method, column method or Napier's bones to work out the exact answer for each one.
a. $48 \times 6$
b. $73 \times 4$
c. $614 \times 7$
d. $28 \times 45$
e. $42 \times 18$
f. $173 \times 24$
2. Use the bus stop method to work out the answer to each problem.
a. $570 \div 5$
b. $438 \div 6$
c. $5761 \div 7$
d. $2912 \div 8$
e. $11547 \div 9$
3. 

a. Find the remainder when 473 is divided by 8 .
b. Find the remainder when 1895 is divided by 6 .
4. Use a formal written method to calculate:
a. $740 \div 20$
b. $456 \div 12$
c. $693 \div 11$
d. $4956 \div 14$
5.
a. On a school trip, 7 buses are used, each of which carry 38 students. Work out the total number of students on the school trip.
b. A rectangular wall measures 27 m by 8 m . Work out the total area of the wall and state the units.
c. A shop orders 18 phones, each of which costs $£ 385$. They then sell these phones at a cost of $£ 510$. Work out the profit the shop makes if it sells all 18 phones.
6.
a. A teacher shares 182 sweets equally amongst 7 students. Work out how many sweets each student receives.
b. A can of paint covers $8 \mathrm{~m}^{2}$ of wall space. Work out how many cans of paint will be needed to cover $1336 \mathrm{~m}^{2}$ of wall space.
c. A minibus can carry 16 people. Work out how many minibuses are needed to transport 560 people.

## Challenge

Design a worded division question which has a remainder.

| WWW | Written Methods for Multiplication and Division |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 1a, b, c | Short multiplication. |  |  |  |
| 1d, e, f | Long multiplication. |  |  |  |
| $\mathbf{2}$ | Short division. |  |  |  |
| 3 | Finding remainders. |  |  |  |
| 4 | Long division. |  |  |  |
| 5 | Multiplication from worded questions. |  |  |  |
| 6 | Division from worded questions. |  |  |  |
| Challenge | Design a division question. |  |  |  |
| EBI |  |  |  |  |

## Answers

1.i)
a) 300
b) 280
c) 4200
d) 1500
e) 800
f) 4000
ii)
a) 288
b) 292
c) 4298
d) 1260
e) 756
f) 4152
2.
a) 114
b) 73
c) 823
d) 364
e) 1283
3.
a) 1
b) 5

