



Using a calculator (2)

- Using the = key to change the order of operations
- Using inverse operations to check a calculation
- Using a calculator to find remainders after division
- Using remainders when solving problems

Keywords

You should know

explanation 1a

explanation 1b

1 Copy the crossword puzzle.

Each clue has a calculation that should help you.

Once you have a calculator answer, look at the display upside down and compare it with the clue. Write the word in the space.

To read your upside-down display:

1 → I, 2 → C, 3 → E, 5 → S

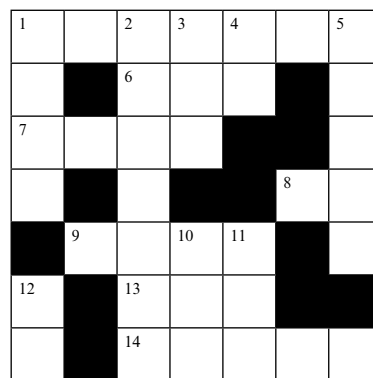
6 → G, 7 → L, 8 → B, 0 → O or D

Across

- 1 Reveals the hidden meaning $40\,771 \times 130$
- 6 Poem $20^2 - 10^2$
- 7 Not hot $\frac{25^2 + 77}{1000}$
- 8 Compass direction $\sqrt{1225}$
- 9 You might find this on a door $2 \times 53 \times 73$
- 13 Combines to mean earth $\left(\frac{3}{5}\right)^2$
- 14 A cube has twelve of these $11^2 \times 443$

Down

- 1 Used in games of chance $30(9^2 + 2(2^2 + 3^2))$
- 2 After school? 3301×1102
- 3 One more than even $1 \div 1000$ to 2 d.p.
- 4 Mix with 1 down to make your mind up $\sqrt{(5 \times 180)}$
- 5 Squares have these, but cubes don't $5 \times \sqrt{529} \times (21^2 + 20)$
- 10 The ones who followed $\frac{2.4^2 + 0.4^2}{16}$
- 11 Not just a stick $\frac{4766}{16} + \frac{2473}{8}$
- 12 Measure of capacity $\sqrt{54} \times \sqrt{96}$



explanation 2

2 Undo these calculations to find the missing values.

a $\square \div 9 = 8.76$

b $\square + 173.89 = 312.6$

c $\square \times 1.175 = 28.905$

d $\sqrt{\square} = 16.2$

e $\square - 97.34 = 421.8$

f $(\square)^2 = 69.8896$

3 I have the answer 102.1348 and I multiplied 12.395 by something to obtain it.

What did I multiply by?



4 a Keira obtained the answer shown on her calculator. The number represents an amount shown in pounds. What should Keira write down as her answer?

1.9

b Use a calculator to work these out and write your answers in pounds.

i $\pounds 1786.37 - \pounds 948.87$

ii $\pounds 78.37 + \pounds 198.32 + \pounds 217.51$

iii $86p \times 45$

iv $(\pounds 973 + \pounds 279) \div 5$

c Undo these calculations to find the missing values.

i $\square \div 12 = \pounds 17.45$

ii $\square \times 9.6 = \pounds 313.92$

5 Work these out. Check your answers by using inverse operations.

a $113.687 \div 14.9$

b 9.81×15.6

c 8.743^2

d $\sqrt{41.6025}$

e 2.3×7.8^2

f $5.9 \times \sqrt{73.96}$

explanation 3

6 Find the remainder for each of these divisions.

a $546 \div 17$

b $2310 \div 9$

c $824 \div 31$

d $2562 \div 68$

e $9751 \div 53$

f $6214 \div 39$

- 7** 5000 nails are put into a machine. The machine puts them into packs that contain 27 nails each.
- a** How many packs of nails can be made?
 - b** How many nails are left over?
- 8**
- a** How many company shares costing £11.24 each can be bought with £400?
 - b** How much change will be given?
- 9** A school day trip is organised for 548 pupils. All of the pupils travel on coaches that can carry 47 pupils each.
- a** How many coaches are needed?
 - b** Calculate the number of empty seats.

explanation 4

- 10** Calculate these to the nearest penny.
- a** $£18.32 \times 3.6$
 - b** $£34.79 \times 2.3$
 - c** $£761 \div 12$
 - d** $£46.10 \div 3$
 - e** $4.8 \times (£7.26 + £1.73)$
 - f** $(£17.32 - £4.78) \div 7$
- 11** You can add VAT to an amount by multiplying it by 1.175.
Add VAT to the following amounts and give each answer to the nearest penny.
- a** £19.50
 - b** £67.89
 - c** £2376.30
 - d** £764.83
 - e** £5177
 - f** £8723.50

- 12** Calculate the area of each these shapes to the nearest 0.1 m^2 .

