



Using a calculator

- 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 this 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 ignore any decimal points.

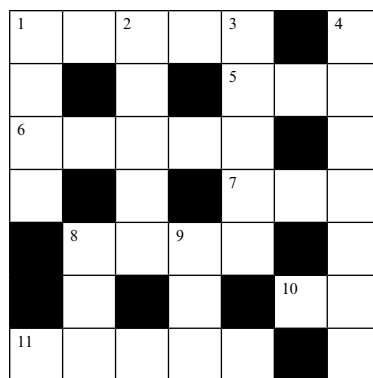
1 → I, 3 → E, 5 → S, 6 → G, 7 → L, 8 → B, 0 → O or D

Across

- Churches have these $2 \times (25\,000 + 53 \times 73)$
- Self esteem $\frac{4.6 + 1.7}{10}$
- Web-footed bird $2 \times (82 + 50)^2 + 158$
- Use a spade $\frac{40^2 + 230}{3}$
- Take away 113×7^2
- Compass direction $\sqrt{1225}$
- Actions $10 \times (53^2 + 4^2 \times 139)$

Down

- Pleads $18 \times 135 + 42096 \div 12 - 300$
- Not tight $125^2 \times 2 + 289 \times 13$
- Cress grows from these $5 \times (100^2 + 67)$
- Use when swimming $6 \times (79 \times 15 + 946^2)$
- An untruth $18^2 - 7$
- Shortened name $\sqrt{0.0225}$



explanation 2a

explanation 2b

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 $\sqrt{(\square)} = 16.3$

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

a $2.463 + 6.981$

b $14.254 - 7.567$

c $113.687 \div 14.9$

d 9.81×15.6

e 8.743^2

f $\sqrt{81.63}$

explanation 3

5 Use inverse operations to find the missing numbers in these calculations.

Check each answer by putting it into the original calculation.

a $\square \times 11.83 + 7.24 = 121.28$

b $\square \div 4.25 - 19.82 = 17.18$

c $\square + 3.28 \times 2 = 10.36$

d $12.5 \div 3.2 + \square = 5.136$

e $\sqrt{(\square + 9.28)} = 4.3$

f $3.7 \times (\square)^2 = 326.932$

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

a $59.2 \div 18.5$

b $12.8 + 13.6 \times 3.1$

c $2.4 + 5.2^2$

d $18 - \sqrt{14.0625}$

e 2.3×1.8^2

f $5.9 \times \sqrt{2.56}$

explanation 4a

explanation 4b

7 Jacob earned £18.50 for 5 hours work.

How much did he earn per hour?

- 8** Newland Junior School has 248 pupils in 8 classes.
How many pupils are in each class?
- 9** Isabel bought 5 pens at 89p each and a pencil case at £1.25.
She paid with a £10 note. How much change did she get?
- 10** Pavel and Sarah are raising money for 3 different children's charities.
Pavel raised £436.80 and Sarah raised £384.76.
- a** How much did they raise altogether?
 - b** They shared the money between the 3 charities equally. How much did each charity receive?

explanation 5

- 11** $237 \div 8 = 29.625$
What calculation shows that the remainder for this division is 5?
- 12** Find the remainder for each of these divisions.
- | | | |
|-------------------------|-------------------------|-------------------------|
| a $545 \div 7$ | b $2310 \div 9$ | c $824 \div 12$ |
| d $2562 \div 68$ | e $9751 \div 53$ | f $6214 \div 39$ |
- 13** 5000 nails are put into a machine. The machine puts them into packs of 27 nails each.
- a** How many packs of nails can be made?
 - b** How many nails are left over?
- 14** A school day trip is organised for 548 pupils. All the pupils travel on coaches that can carry 47 pupils each.
- a** How many coaches are needed?
 - b** Calculate the number of empty seats.