



Written methods for multiplying and dividing

- Multiplying and dividing using written methods
- Estimating the value of calculations

Keywords

You should know

explanation 1a

explanation 1b

1 Work these out. Show your method.

a 24×6 **b** 32×5 **c** 41×8 **d** 362×4 **e** 507×9 **f** 856×7

2 Use $423 \times 9 = 3807$ to calculate these.

a 42.3×9 **b** 4.23×9 **c** 8.46×9

3 a Work these out.

i 576×4 **ii** 812×6 **iii** 284×5

b Use your answers to part **a** to write the answer to each calculation.

i 5.76×4 **ii** 57.6×4 **iii** 81.2×6
iv 28.4×5 **v** 8.12×6 **vi** 2.84×5

4 Work these out.

a 3.6×4 **b** 7.3×8 **c** 0.26×3
d 0.71×5 **e** 5.2×5 **f** 0.59×9

explanation 2

3429

1729

5144

4404

5 a Which answer belongs with which calculation? Use estimation to find out.

i 643×8 **ii** 247×7 **iii** 381×9 **iv** 734×6

b Write the value of each calculation.

i 24.7×7 **ii** 6.43×8 **iii** 73.4×6 **iv** 3.81×9

c Work out the value of $64.3 \times 8 + 6 \times 7.34$.

6 Work these out.

a 2.43×5

b 82.4×6

c 9×1.72

d 3.65×4

e $11 + 7 \times 5.32$

f $8(1.34 + 7.6)$

7 Work these out.

a $£9.27 \times 5$

b $£1.76 \times 4$

c $9 \times £8.32$

8 Socks cost £2.48 per pair and t-shirts cost £9.94 each. Jennie buys six pairs of socks and three t-shirts. The shopkeeper says the total cost is £54.70.

a Use estimation to show that £54.70 is too much.

b Work out how much Jennie should pay.

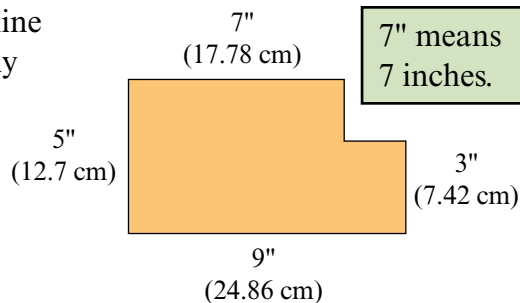
9 Glasses cost £7.95 each. Steve has a £50 note. He wants to buy 6 glasses.

a Use estimation to show that Steve has enough money.

b Work out how much change Steve will receive.

10 The diagram shows one view of a machine part. The labelled lengths were originally measured accurately in inches.

A new part is to be made of the same size but converted to cm using $1" = 2.54\text{ cm}$.



a Find out which measurements have not been converted correctly.

b Work out the correct values.

explanation 3a

explanation 3b

11 Work these out.

a 24×16

b 34×53

c 28×65

d 21×86

e 82×94

f 76×43

12 Work these out.

a 247×31

b 546×44

c 63×128

13 Sundeep earns £376 per week. How much will he earn in a year?

explanation 4a

explanation 4b

14 Write an estimate for each division and then find the exact value.

a $576 \div 6$

b $315 \div 7$

c $520 \div 5$

d $5247 \div 3$

e $3456 \div 9$

f $17864 \div 8$

15 Work these out.

a $12.6 \div 3$

b $7.24 \div 4$

c $39.2 \div 8$

d $524.4 \div 6$

e $89.45 \div 5$

f $2483.6 \div 7$

16 Eight ice creams cost £7.76.
Were they more, or less, than £1 each?
Work out the price of each ice cream.

17 Five friends share the total cost of £147 for a meal at a restaurant.
How much do they each have to pay?

18 Calculate the mean of 4.63, 7.25, 6.78 and 5.3.

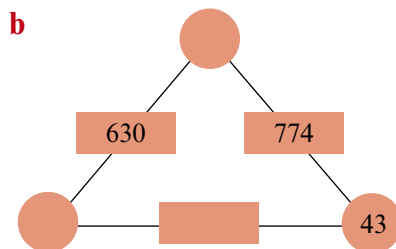
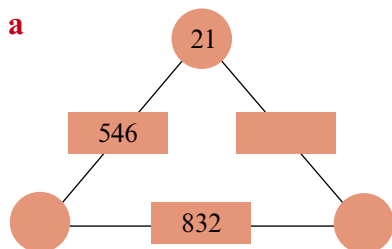
19 Write an estimate for each division and then find the exact value.

a $575 \div 23$

b $868 \div 31$

c $748 \div 17$

20 Copy and complete. The numbers in the rectangles are the product of the numbers in the circles on either side.



21 A kitchen floor measures 551 cm by 483 cm. It is to be covered with floor tiles. The tiles measure 29 cm by 23 cm.
How many tiles are needed?