



Written methods for multiplying and dividing

- Multiplying and dividing by a single-digit number using written methods
- Solving problems involving money
- Multiplying and dividing by multiples of 10, 100 and 1000
- Multiplying by a two-digit number using written methods

Keywords

You should know

explanation 1a

explanation 1b

1 Work out these multiplications.

a
$$\begin{array}{r} 134 \\ \times 2 \\ \hline \end{array}$$

b
$$\begin{array}{r} 324 \\ \times 3 \\ \hline \end{array}$$

c
$$\begin{array}{r} 253 \\ \times 4 \\ \hline \end{array}$$

d
$$\begin{array}{r} 243 \\ \times 5 \\ \hline \end{array}$$

e
$$\begin{array}{r} 452 \\ \times 6 \\ \hline \end{array}$$

f
$$\begin{array}{r} 516 \\ \times 2 \\ \hline \end{array}$$

g
$$\begin{array}{r} 651 \\ \times 3 \\ \hline \end{array}$$

h
$$\begin{array}{r} 726 \\ \times 4 \\ \hline \end{array}$$

i
$$\begin{array}{r} 835 \\ \times 5 \\ \hline \end{array}$$

j
$$\begin{array}{r} 625 \\ \times 6 \\ \hline \end{array}$$

2 Work these out. Show your method.

a 24×6

b 32×5

c 41×6

d 362×4

e 507×9

f 856×7

g 381×5

h 247×6

i 623×8

3 Sakina saves 5p a day for a whole year.

How much money has she saved by the end of the year (365 days)?



4 Mrs Jennings runs a bookshop. She makes £3 profit on every hardback book she sells. In March she sold 246 hardback books.

How much profit did she make in March?

- 5** At Funworld amusement park 263 adult tickets and 321 child tickets were bought.

How much money was made from ticket sales?



explanation 2

- 6** Work out these divisions.

a $2 \overline{)468}$

b $3 \overline{)936}$

c $2 \overline{)652}$

d $3 \overline{)786}$

e $4 \overline{)496}$

f $2 \overline{)958}$

g $4 \overline{)252}$

h $3 \overline{)885}$

i $3 \overline{)237}$

j $4 \overline{)388}$

- 7** Work these out. Show your method.

a $336 \div 6$

b $630 \div 5$

c $792 \div 6$

d $940 \div 4$

e $1242 \div 9$

f $945 \div 7$

g $4305 \div 5$

h $3204 \div 6$

i $3696 \div 8$

- 8** Work out these multiplications and divisions to find the odd one out.

a i 235×6

ii 272×5

iii 705×2

b i $984 \div 4$

ii $1225 \div 5$

iii $738 \div 3$

c i $1820 \div 5$

ii $1095 \div 3$

iii $1460 \div 4$

d i 146×8

ii $3504 \div 3$

iii 196×6

- 9** There are 168 pupils going on a school trip. The school has ordered 6 coaches.

How many pupils will be on each coach?



- 10** Mr Chan plays the lottery with 3 of his friends.

They share any winnings equally between them.

The team won £1568 in the latest draw.

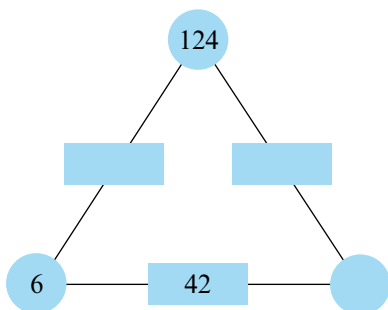
How much did each person win?



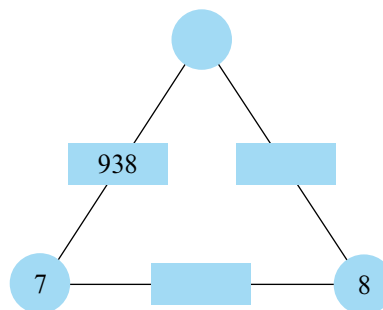
- 11** Jafar wants to buy an electric guitar that costs £256. He saves £8 per week. How many weeks does he need to save for?

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

a



b



You find the product of two numbers by multiplying the numbers together.

explanation 3

- 13** Jason collects old records.
At a recent record fair he bought 7 records for £11.83.
What did each record cost?

- 14** Mia buys 4 books at the supermarket for £3.73 each.

- a** How much money does she spend?
b What change would she get from a £20 note?

- 15** 5 friends share the cost of a meal at a restaurant.

The total charged is £139.65

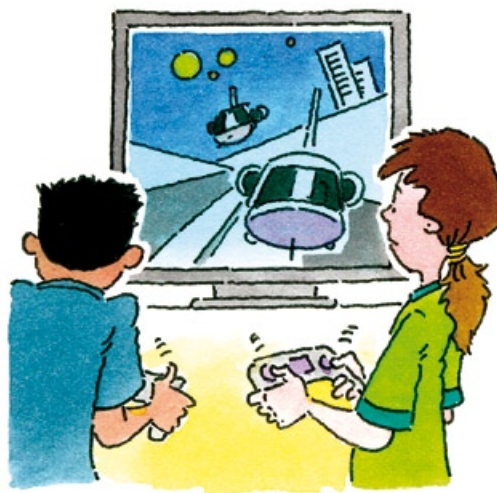
How much do they each have to pay?

- 16** Abdul wants three games for his games console at £37.64 each.

a How much money will this cost?

b He saves for 6 months to pay for the games.

How much did he save each month?



- 17** At a department store sale Beatrice bought 5 t-shirts for £3.74 each and 2 pairs of shorts for £4.87 each.

a Beatrice estimated by rounding the amounts to the nearest £1.

How much was her estimate for the total cost?

b Is her estimate an overestimate or an underestimate? How do you know?

c How much did Beatrice spend?

d Beatrice pays with £30 cash. How much change did she get?

- 18** The school shop bought 8 boxes of pencils to sell.

Each box has 135 pencils in it.

a How many pencils are there altogether?

b The shop charges 6p for each pencil. How much money do they make if all the pencils are sold?

c The shop buys each box for £6.58. How much money did the shop pay for the 8 boxes of pencils?

d How much profit does the shop make from selling all the pencils?



explanation 4

19 Work these out.

a 13×30

b 25×40

c 36×20

d $800 \div 20$

e 30×80

f $400 \div 80$

g $240 \div 60$

h 320×30

i 81×200

j $630 \div 30$

k $450 \div 90$

l $6400 \div 80$

m 44×20

n $360 \div 60$

o 12×30

p $4900 \div 70$

20 Solve the clues and complete the crossnumber.

Across

Down

1 $4260 \div 20$

1 $12050 \div 50$

4 146×30

2 $6800 \div 20$

5 $4800 \div 40$

3 40×120

7 $16080 \div 80$

6 75×30

9 70×50

7 $61800 \div 300$

10 40×15

8 $10400 \div 80$

1		2		3	
		4			
5	6				
		7		8	
9					
		10			

explanation 5a

explanation 5b

21 Copy and complete.

a

$$\begin{array}{r} 231 \\ \times 24 \\ \hline \end{array}$$

\swarrow 231×4
 \searrow 231×20

0

b

$$\begin{array}{r} 362 \\ \times 23 \\ \hline \end{array}$$

\swarrow 362×3
 \searrow 362×20

0

22 Copy and complete.

a

$$\begin{array}{r} 235 \\ \times 32 \\ \hline \end{array}$$

b

$$\begin{array}{r} 164 \\ \times 35 \\ \hline \end{array}$$

c

$$\begin{array}{r} 267 \\ \times 28 \\ \hline \end{array}$$

23 Work these out.

a 24×16

b 34×53

c 28×65

d 247×31

e 546×44

f 63×128

g 27×19

h 63×12

i 112×40

j 245×32

k 34×165

l 87×53

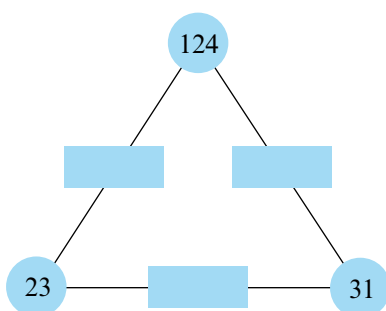
m 76×46

n 321×123

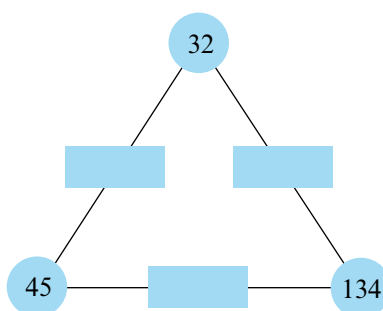
o 247×351

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

a



b



explanation 6

25 $615 \times 4 = 2460$

Work out these.

a 4×615

b $2460 \div 4$

c $2460 \div 615$

d 615×40

e 6150×4

f 615×8

***26**

$2572 \times 2 = 5144$

$1468 \times 3 = 4404$

$381 \times 9 = 3429$

$247 \times 7 = 1729$

Use the calculations above to help you work these out.

a 2572×20

b 1468×6

c 381×18

d 247×70

e 257.2×2

f 1468×0.3

g 3.81×9

h 2.47×7