

Written Addition

Mental Maths Warm Up

Answer these as quickly as you can, saying your answer out loud or in your head...

- 1) Think of 5 pairs of numbers that add to 10.
- 2) Say the value of each digit in the number 12345.
- 3) Work out $17 + 5$ in your head.
- 4) Work out $3 + 4 + 5$ in your head.

Answers: 1) E.g. 1+9, 2+8, 3+7, 4+6, 5+5 2) one ten thousand, two thousands, three hundreds, four tens, five ones 3) 22 4) 12

Now try these. Do your working in the spaces, and copy your answers into the boxes.
One has been done for you.

1) $21 + 34$

Start with the units:
 $1 + 4 = 5$

Then the tens:
 $2 + 3 = 5$

$$\begin{array}{r} 21 \\ + 34 \\ \hline 55 \end{array}$$

55

2) $15 + 64$

79

1 mark

3) $38 + 45$

83

1 mark

4) $73 + 87$

160

1 mark

5) $94 + 38$

132

1 mark

6) $134 + 451$

585

1 mark

7) $208 + 512$

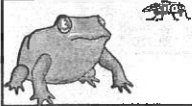
720

1 mark

8) $337 + 228$

565

1 mark



Written Addition

9) $791 + 148$

939

1 mark

10) $652 + 547$

1199
+ 1399

1 mark

11) $484 + 267$

751

1 mark

12) $227 + 583$

810

1 mark

13) $953 + 787$

1740

1 mark

14) $2134 + 3421$

5555

1 mark

15) $54 + 210$

Make sure you line up the digits in columns carefully!

264

1 mark

16) $94 + 701$

795

1 mark

17) $942 + 30$

972

1 mark

18) $7787 + 999$

You could do $7787 + 1000 - 1$ if you find it easier.

8786

1 mark



Written Addition

19) $202 + 8798$

9000

1 mark

20) $27350 + 34201$

63551

1 mark

21) $86425 + 57386$

143811

1 mark

22) $27287 + 3443$

30730

1 mark

23) $222 + 33 + 44$

Adding three numbers works just the same as adding two numbers together.

299

1 mark

24) $207 + 304 + 442$

953

1 mark

25) $1422 + 337 + 61$

1820

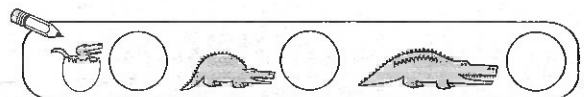
1 mark

26) $88888 + 777 + 4444$

94109

1 mark

A Calculgator can add up numbers with more than 4 digits in columns. Can you? Tick the box.





Written Subtraction

Mental Maths Warm Up

Answer these as quickly as you can, saying your answer out loud or in your head...

- 1) What number is in the tens column of 683?
- 2) What is $8 - 3$?
- 3) Take away 5 from 27.
- 4) Take 20 away from 60.

Answers: 1) 8 2) 5 3) 22 4) 40

Now try these. Do your working in the spaces, and copy your answers into the boxes.
One has been done for you.

1) $47 - 24$

$$\begin{array}{r} 47 \\ - 24 \\ \hline 23 \end{array}$$

Start with the units:
 $7 - 4 = 3$

Then the tens:
 $4 - 2 = 2$

23

2) $58 - 26$

32

1 mark

3) $95 - 13$

82

1 mark

4) $64 - 26$

You'll have to exchange
a ten for 10 ones to
answer this one.

38

1 mark

5) $867 - 146$

721

1 mark

6) $749 - 238$

511

1 mark

7) $841 - 340$

501

1 mark

8) $267 - 149$

118

1 mark



Written Subtraction

9) $694 - 258$

You could check your answers by adding.

436

1 mark

14) $798 - 37$

761

1 mark

10) $280 - 176$

104

1 mark

15) $584 - 36$

548

1 mark

11) $661 - 380$

281

1 mark

16) $997 - 968$

29

1 mark

12) $70 - 8$

62

1 mark

17) $834 - 762$

72

1 mark

13) $329 - 15$

Make sure you line up the hundreds, tens and ones.

18) $942 - 857$

314

1 mark

85

1 mark



Written Subtraction

It can help to line up the ones when you subtract numbers with different numbers of digits.

19) $6485 - 3261$

3224

1 mark

20) $7354 - 5426$

1928

1 mark

21) $5843 - 217$

5626

1 mark

22) $3251 - 198$

3053

1 mark

23) $2648 - 649$

You could do
 $2648 - 648 - 1$
if you find it easier.

1999

1 mark

24) $3344 - 444$

2900

1 mark

25) $6271 - 349$

5922

1 mark

26) $9064 - 318$

8746

1 mark



Written Subtraction

27) $82578 - 2210$

80368

1 mark

28) $68545 - 68$

68477

1 mark

29) $45876 - 6863$

39013

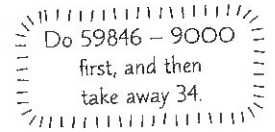
1 mark

30) $25186 - 6446$

18740

1 mark

31) $59846 - 9000 - 34$



50812

1 mark

32) $25498 - 5586 - 12$

19900

1 mark

33) $19861 - 234 - 67$

19560

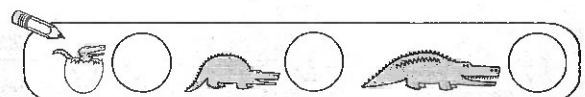
1 mark

34) $76519 - 2056 - 35$

74428

1 mark

— *Calculators love subtracting numbers in columns. They do it all the time. How did you do?*





Multiplying by 10, 100 and 1000

Mental Maths Warm Up

Answer these as quickly as you can, saying your answer out loud or in your head...

- 16 multiplied by what gives you 1600?
- Find the missing number. $568 \times ? = 5680$
- There are 1000 times more flowers in a field in spring than in winter. If there are 47 in winter, how many are there in spring?

Answers: 1) 100 2) 10 3) 47000

Now try these questions, and write your answers in the boxes. One has been done for you.

1) 13×10

10 has one zero, so move the digits in 13 one place to the left.

$13 \rightarrow 13_ \rightarrow 130$

Fill in the gap with a 0.

130

2) 59×100

To multiply by 100, move the digits two places to the left.

5900

1 mark

3) 873×10

8730

1 mark

4) 6437×100

643700

1 mark

5) 761×1000

To multiply by 1000, move the digits three places to the left.

761000

1 mark

6) 9530×10

95300

1 mark

7) 4005×1000

4005000
405

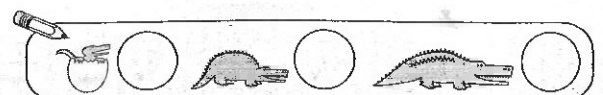
1 mark

8) 910×1000

910000

1 mark

Calculators remember to move the digits to the left when multiplying by 10, 100 and 1000. Did you?





Dividing by 10, 100 and 1000

Mental Maths Warm Up

Answer these as quickly as you can, saying your answer out loud or in your head...

- 1) What should you divide 30 by to get 3?
- 2) 32000 divided by what gives you 32?
- 3) What is $900 \div 100$?
- 4) Find the missing number. $600 \div ? = 60$

Answers: 1) 10 2) 1000 3) 9 4) 10

Now try these questions, and write your answers in the boxes. One has been done for you.

1) $70 \div 10$

10 has one zero,
so move the digits
in 70 one place to
the right.

$70 \rightarrow 7$ ← This is the same
as knocking
off one 0.

7

2) $550 \div 10$

55

1 mark

3) $9800 \div 100$

To divide by 100, move the
digits two places to the right.

98

1 mark

4) $1600 \div 10$

160

1 mark

5) $74000 \div 100$

740

1 mark

6) $3000 \div 1000$

To divide by 1000, move the
digits three places to the right.

3

1 mark

7) $68000 \div 1000$

68

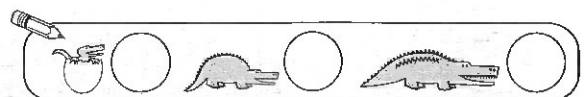
1 mark

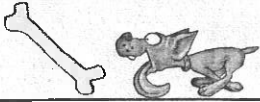
8) $40000 \div 1000$

40

1 mark

If you like moving digits to the right like Calcugators, then you'll find this page OK. How do you feel?





Using Times Tables

Mental Maths Warm Up

Answer these as quickly as you can, saying your answer out loud or in your head...

- 1) Say the 4 times table up to 5×4 out loud.
- 2) $12 \times 7 = 84$. What is 13×7 ?
- 3) $15 \times 6 = 90$. What is 6×15 ?
- 4) Is 35 in the 8 times table?

Answers: 1) $1 \times 4 = 4, 2 \times 4 = 8, 3 \times 4 = 12, 4 \times 4 = 16, 5 \times 4 = 20$
2) 91 3) 90 4) No

Now try these. Put your answers in the boxes.

1) 3×11

33

1 mark

2) 2×12

24

1 mark

3) 5×9

45

1 mark

4) 11×10

110

1 mark

5) 5×7

5 × 7 is the same as 7 × 5.

35

1 mark

6) 6×8

48

1 mark

7) 9×3

27

1 mark

8) 12×12

144


1 mark



Using Times Tables

Now try using your times tables to divide. One has been done for you.

9) $12 \div 6$

$2 \times 6 = 12$,  You're looking for where 12 appears in the 6 times table.
so $12 \div 6 = 2$

2

10) $24 \div 2$

12

1 mark

11) $18 \div 6$

3

1 mark

12) $55 \div 5$

11

1 mark

13) $28 \div 7$

4

1 mark

14) $56 \div 7$

8

1 mark

15) $72 \div 8$

9

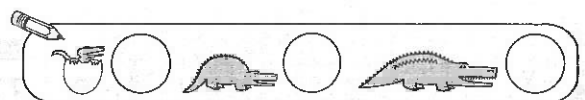
1 mark

16) $108 \div 12$

9

1 mark

Are you a whizz at your times tables, just like a Calcugator? Tick the box to show how you did.





Multiples and Factors

Mental Maths Warm Up

Answer these as quickly as you can, saying your answer out loud or in your head...

- 1) List all the prime numbers up to 20.
- 2) Which of these is **not** a factor of 126? 2 or 3 or 5
- 3) Find two numbers which both have 3 **and** 6 as factors.
- 4) Find a number that's a multiple of both 2 **and** 9.

Answers: 1) 2, 3, 5, 7, 11, 13, 17, 19
2) 5 3) E.g. 6 and 12 4) E.g. 18

Now try Questions 1 to 4. Write down the first five multiples of each number. One has been done for you

1) 7

The multiples of a number are just the numbers in its times table.

7, 14, 21, 28, 35

2) 25

25, 50, 75, 100, 125

1 mark

3) 80

80, 160, 240, 320, 400

1 mark

4) 36

36, 72, 108, 144, 180

1 mark

For Questions 5 and 6, find all the factors of each number.

5) 24

The factors of 24 are all the numbers that 24 divides by exactly.

1, 2, 3, 4, 6, 8, 12, 24

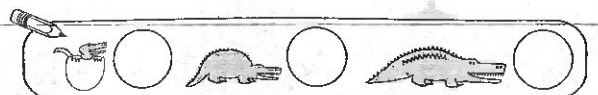
1 mark

6) 63

1, 3, 7, 9, 21, 63

1 mark

Calculators like to find multiples and factors of every number they meet. How easy did you find it?





Short Multiplication

Mental Maths Warm Up

Answer these as quickly as you can, saying your answer out loud or in your head...

- 1) Find the missing number. $18 \times 5 = 5 \times ?$
- 2) What is 7×3 ?
- 3) What is 50×3 ?
- 4) Work out 57×3 .

Answers: 1) 18 2) 21 3) 150 4) 171

Now try these. Do your working in the spaces, and copy your answers into the boxes. One has been done for you.

1) 27×6

$$\begin{array}{r} 27 \\ \times 6 \\ \hline 162 \\ \hline 4 \end{array}$$

$7 \times 6 = 42$, so put 2 in the units column and carry the 4 to the tens column.

$2 \times 6 = 12$, then add the 4 you carried to get 16

162

4) 76×3

228

1 mark

2) 52×8

416

1 mark

5) 85×4

340

1 mark

3) 18×7

126

1 mark

6) 439×9

3951

1 mark



Short Multiplication

7) 5115×5

25575

1 mark

8) 1495×3

4485

1 mark

9) 1986×4

7944

1 mark

10) 4275×2

8550

1 mark

11) 8495×4

33980

1 mark

12) 3196×9

28764

1 mark

13) 2014×7

14098

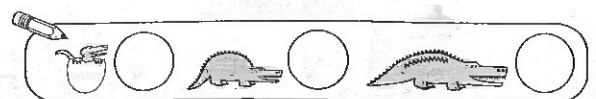
1 mark

14) 2035×8

16280

1 mark

Calculators love writing out multiplications in columns. How about you? Tick the box.





Long Multiplication

Mental Maths Warm Up

Answer these as quickly as you can, saying your answer out loud or in your head...

- 1) Mary buys 19 stickers each for 12 friends. Estimate how many stickers she buys.
- 2) Estimate the answer to 399×19 .
- 3) Partition the number 19 to make it easier to multiply by.
- 4) What is 400×30 ?

Answers: 1) E.g. 200 (20 × 10) 2) E.g. 8000 (400 × 20) 3) 1 ten and 9 ones 4) 12000

Now try these. Do your working in the spaces, and copy your answers into the boxes.
One has been done for you.

1)

$$\begin{array}{r} 247 \\ \times 28 \\ \hline 1976 \\ 35 \\ 4940 \\ 1 \\ \hline 6916 \\ 11 \end{array}$$

First find 247×8 using short multiplication.

Then find 247×20 . This is the same as multiplying by 2, then moving the digits one place to the left.

Finally, add up your two answers:
 $1976 + 4940 = 6916$

6916

3)

$$\begin{array}{r} 685 \\ \times 71 \\ \hline 685 \\ 47950 \\ \hline 48635 \end{array}$$

48635

2 marks

2)

$$\begin{array}{r} 284 \\ \times 23 \\ \hline 852 \\ 5680 \\ \hline 6532 \end{array}$$

Make sure you show your working for these 2 mark questions.

4)

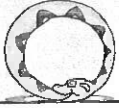
$$\begin{array}{r} 768 \\ \times 32 \\ \hline 1536 \\ 30 \\ 1536 \\ 23040 \\ \hline 24576 \end{array}$$

6532

2 marks

2 marks

2 marks for the correct answer, 1 mark if the answer is wrong but a correct method has been used.



Long Multiplication

$$\begin{array}{r}
 5) \quad 5856 \\
 \times \quad 36 \\
 \hline
 35136 \\
 175680 \\
 \hline
 210816
 \end{array}$$

210816

2 marks

$$\begin{array}{r}
 8) \quad 7842 \\
 \times \quad 68 \\
 \hline
 62736 \\
 470520 \\
 \hline
 533256
 \end{array}$$

533256

2 marks

$$\begin{array}{r}
 6) \quad 1955 \\
 \times \quad 54 \\
 \hline
 7820 \\
 97750 \\
 \hline
 105570
 \end{array}$$

105570

2 marks

$$\begin{array}{r}
 9) \quad 4444 \\
 \times \quad 44 \\
 \hline
 17776 \\
 177760 \\
 \hline
 195536
 \end{array}$$

195536

2 marks

Use estimating to
check your answer.

$$\begin{array}{r}
 7) \quad 3296 \\
 \times \quad 22 \\
 \hline
 6592 \\
 65920 \\
 \hline
 72512
 \end{array}$$

72512

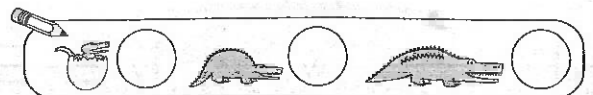
2 marks

$$\begin{array}{r}
 10) \quad 8888 \\
 \times \quad 88 \\
 \hline
 71104 \\
 711040 \\
 \hline
 782144
 \end{array}$$

782144

2 marks

A Calculgator enjoys using long multiplication to find the right answer. How did you find these pages?





Short Division with No Remainders

Mental Maths Warm Up

Answer these as quickly as you can, saying your answer out loud or in your head...

- 1) Partition 245 into hundreds, tens and ones.
- 2) What's 400 divided by 4?
- 3) Abed has 240 books. He divides them equally between three shelves. How many books does he have on each shelf?
- 4) What is $540 \div 9$?

Answers: 1) 2 hundreds, 4 tens and 5 ones
2) 100 3) 80 4) 60

Now try these. Do your working in the spaces, and copy your answers into the boxes. One has been done for you.

1) $196 \div 4$

4 doesn't go into 1, so exchange the 1 hundred for 10 tens. $4 \overline{) 1936}$ $36 \div 4 = 9$

$19 \div 4 = 4 \text{ r } 3$
Exchange the 3 tens for 30 ones.

49

2) $108 \div 6$

18

1 mark

3) $207 \div 9$

23

1 mark

4) $448 \div 7$

64

1 mark

5) $352 \div 4$

88

1 mark

6) $728 \div 7$

104

1 mark

7) $696 \div 8$

87

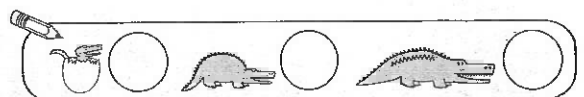
1 mark

8) $495 \div 5$

99

1 mark

Calcigators are experts at setting out short division properly. How about you? Tick the box.





Short Division with Remainders

Mental Maths Warm Up

Answer these as quickly as you can, saying your answer out loud or in your head...

- Partition 3694 into thousands, hundreds, tens and ones.
- Phil has 43 toy cars which he divides evenly between 4 boxes. How many are left over?
- $5 \div 2 = 2 \text{ r } 1$. Write the remainder as a fraction.
- $617 \div 8$ leaves a remainder of 1. What is the remainder as a fraction?

Answers: (1) 3 thousands, 6 hundreds, 9 tens and 4 ones
(2) $3 \frac{3}{4}$
(3) $\frac{1}{2}$
(4) $\frac{1}{8}$

For each of these questions, write the remainder as a whole number.
One has been done for you.

1) $212 \div 8$

$21 \div 8 = 2 \text{ r } 5$
Put a 2 on the top and exchange the 5 tens for 50 ones.

$52 \div 8 = 6 \text{ r } 4$

$$\begin{array}{r} 26 \text{ r } 4 \\ 8 \overline{) 212} \end{array}$$

26 r 4

2) $875 \div 4$

218 r 3

1 mark

3) $267 \div 7$

38 r 1

1 mark

4) $386 \div 3$

128 r 2

1 mark

5) $435 \div 4$

108 r 3

1 mark

6) $505 \div 9$

56 r 1

1 mark

7) $5489 \div 8$

686 r 1

1 mark

8) $1247 \div 6$

207 r 5

1 mark



Short Division with Remainders

For each of these questions write the remainder as a fraction. One has been done for you.

9) $399 \div 5$

$$5 \overline{) 399} \text{ r } 4 = 79 \frac{4}{5}$$

You're dividing by 5,
so the remainder of 4
becomes a fraction of $\frac{4}{5}$.

$79 \frac{4}{5}$

13) $3587 \div 4$

$896 \frac{3}{4}$

1 mark

10) $445 \div 2$

Remember — remainders written as fractions have the number you're dividing by on the bottom.

$222 \frac{1}{2}$

1 mark

14) $7864 \div 9$

$873 \frac{7}{9}$

1 mark

11) $658 \div 3$

$219 \frac{1}{3}$

1 mark

15) $5050 \div 7$

$721 \frac{3}{7}$

1 mark

12) $157 \div 6$

$26 \frac{1}{6}$

1 mark

16) $2453 \div 8$

$306 \frac{5}{8}$

1 mark

Calculators can write remainders in different ways. What about you? Tick the box.

