1. Join each box to the correct number.

One has been done for you.


32

## half of 98

## 44

double $4 \times 4$
2. Calculate $\mathbf{2 3 9}+\mathbf{1 8 2}$

49

1 mark
3. Calculate $\mathbf{3 6 4 \div 7}$

1 mark
4. Calculate $\mathbf{4 5 . 3 \times 6}$

1 mark
5. Ben thinks of a number.


He adds half of the number to a quarter of the number.
The result is 60
What was the number Ben first thought of?

6. Emily chooses two numbers.


She adds the two numbers together and divides the result by 2
Her answer is 44
One of Emily's numbers is 12

What is Emily's other number?

7. How much less than 1000 is $9.7 \times 9.8 \times 9.9$ ?


1 mark
8. Write in the missing numbers.


1 mark
$4 \times$

9. Circle one number in each box to make a total of 1000

| 150 |
| :--- |
| 250 |
| 350 |
| 450 |



1 mark
10. Write one number which fits all three of these statements.

It is a multiple of 4
It is a multiple of 6
It ends in '8'


Explain why a number which ends in ' 3 ' cannot be a multiple of 4


1 mark
11. The signs are missing from these number sentences.

Write in the missing signs, $+-\times$ or $\div$ The first has been done for you.
6

$5=40$

10
20

$8=4$

7
21

$3=15$


8
12. Calculate $1.2 \times(1.3+1.4) \times 1.5$


1 mark
13. Write these numbers in the correct places on the diagram.

14. Write in the missing numbers.

$35 \times \square=140$

1 mark

1 mark
15. Here is a number sentence.

$$
? \quad+27>85
$$

Circle all the numbers below that make the number sentence correct.


1 mark
16. Circle the two prime numbers.
(29
39
49
59 69

1 mark
17. Draw lines to join all the pairs of number cards which have a difference of 30 One has been done for you.
\$


330

18. Circle three numbers that add to make a multiple of $\mathbf{1 0}$


1 mark
19. Calculate $56 \div 4$

1 mark
20. Calculate $1202+45+367$


1 mark
21. Calculate $143 \times 37$


2 marks
22. $\mathbf{A}$ and $\mathbf{B}$ are two numbers on the number line below.


The difference between $\mathbf{A}$ and $\mathbf{B}$ is 140
Write the values of $\mathbf{A}$ and $\mathbf{B}$.

23. Circle the numbers that add up to 100


1 mark
24. Each missing digit in these calculations is $\mathbf{2 , 5}$ or $\mathbf{7}$

Write in the missing digits.
You may use each digit more than once.

25. Josh thinks of a number.


He adds 4
He multiplies his result by 3
Then he takes away 9
His final answer is 90
What number did Josh start with?


1 mark
26.
7.4
8.1
9.4

10
Which two of these numbers, when multiplied together, have the answer closest to 70 ?

27. Write in the missing numbers.

28. Use each number card once to make the answer to each calculation an even number.

29. Calculate $13.6-2.8$


1 mark
30. Here is a sorting diagram for numbers.

Write a number less than 100 in each space.

31. Write in the missing numbers in this multiplication grid.

| $* \times$ | 5 | $\square$ | $\square$ |
| :---: | :---: | :---: | :---: |
| 4 | 20 | 36 | 32 |
| $\square$ | 35 | 63 | 56 |
| $\square$ | 30 | 54 | 48 |

32. Calculate $900 \div(45 \times 4)$

33. Liam thinks of a number.


He multiplies the number by 5 and then subtracts $\mathbf{6 0}$ from the result.
His answer equals the number he started with.
What was the number Liam started with?


[^0]34. Write in the missing numbers.


1 mark


1 mark
35.


In a supermarket storeroom there are
7 boxes of tomato soup
5 boxes of pea soup
4 boxes of chicken soup
There are $\mathbf{2 4}$ tins in every box.
How many tins of soup are there altogether?


2 marks
36. Write in the missing numbers.

37. Here are five number cards.

$A$ and $B$ stand for two different whole numbers.
The sum of all the numbers on all five cards is 30
What could be the values of A and B ?


1 mark
38. Write the largest whole number to make this statement true.

39. A sequence of numbers starts at 11 and follows the rule
'double the last number and then subtract 3'
$111935 \quad 67 \quad 131 \ldots$
The sequence continues.
The number 4099 is in the sequence.
Calculate the number which comes immediately before 4099 in the sequence.

40. Write in the missing numbers.

| $55+\square$ | $=\square 120$ |
| ---: | :--- |
| $600 \times 4$ | $=\square$ mark |
| 1 |  |

41. Calculate $\mathbf{3 0 9} \mathbf{- 1 9 8}$

42. Each of these bags contains $£ 1.60$

Each bag contains only one type of coin.


Complete this table to show how many coins are in each bag.
One has been done for you.

| Type of coin | Number of coins |
| :---: | :---: |
| $1 p$ | 160 |
| $10 p$ |  |
| $20 p$ |  |

43. 



Tom and Nadia have 16 cards each.
Tom gives Nadia 12 of his cards.

How many cards do Tom and Nadia each have now?


1 mark

Lucy also has 16 cards.
She gives a quarter of her cards to Kiran.
How many cards does Lucy give to Kiran?


1 mark
44. Calculate $2307 \times 8$


1 mark
45. Here are four digit cards.


Choose two cards each time to make the following two-digit numbers.
The first one is done for you.

46. Write in the missing number.

47. Debbie has a pack of cards numbered from 1 to 20

She picks four different number cards.


Exactly three of the four numbers are multiples of 5
Exactly three of the four numbers are even numbers.
All four of the numbers add up to less than 40
Write what the numbers could be.

48. Write in the missing numbers.

$\square 4=21$
49. Here are five digit cards.


Use all five digit cards once to make this sum correct.

50. There are $\mathbf{5}$ balloons in a packet.

There are 18 packets in a box.


How many balloons are there altogether in a box?


1 mark

There are 5 balloons in a packet.


Kofi needs 65 balloons.
How many packets does he need?

51. Write what the three missing digits could be in this calculation.

52. Here is a diagram for sorting numbers.

Write one number in each white section of the diagram.

53. In this sequence each number is double the previous number.

Write in the missing numbers.

$\begin{array}{llll}3 & 6 & 12 & 24\end{array}$
48

54. $\mathbf{k}, \mathbf{m}$ and $\mathbf{n}$ each stand for a whole number.

They add together to make 1500

$$
k+m+n=1500
$$

$\mathbf{m}$ is three times as big as $\mathbf{n}$.
$\mathbf{k}$ is twice as big as $\mathbf{n}$.
Calculate the numbers $\mathbf{k}, \mathbf{m}$ and $\mathbf{n}$.

55.


Cheddar cheese costs $£ 7.50$ for 1 kg .
Marie buys 200 grams of cheddar cheese.
How much does she pay?


1 mark

Cream cheese costs $£ 3.60$ for 1 kg .
Robbie buys a pot of cream cheese for 90p.


How many grams of cream cheese does he buy?

56. Draw lines to join the circle to two more number cards which make 150

57. Write in the missing numbers.


1 mark

58. Circle all the multiples of 8 in this list of numbers.

| 18 | 32 | 56 | 68 | 72 |
| :--- | :--- | :--- | :--- | :--- |

59. 



Choose three of these number cards to make an even number that is greater than 400

60. Write in the missing digits.

61. Calculate $417 \times 20$

1 mark
62. Calculate $\mathbf{1 5 . 0 5} \mathbf{- 1 4 . 8 4}$

1 mark
63. Write in the two missing digits.

64. Calculate $\mathbf{9 2 4} \div \mathbf{2 2}$


2 marks
65. Draw a line from each card to the correct part of the number line.

One has been done for you.
You may use a calculator.

66. Write in the missing numbers.


67. Jemma thinks of a number.

She says,
'Add 3 to my number and then multiply the result by 5 The answer is $35^{\prime}$

What is Jemma's number?

Riaz thinks of a number.
He says,
'Halve my number and then add 17
The answer is $23^{\prime}$
What is Riaz's number?


1 mark
68. Write in the missing number.

69. There are 24 coloured cubes in a box.

Three-quarters of the cubes are red,
four of the cubes are blue
and the rest are green.


How many green cubes are in the box?


One more blue cube is put into the box.
What fraction of the cubes in the box are blue now?


1 mark
70. Use a calculator to work out $49.3 \times(2.06+8.5)$


1 mark
71. Circle the number closest in value to $\mathbf{0 . 1}$
\$
$0.01 \quad 0.05$
0.11
0.2
0.9
72. Write in what the missing numbers could be.

73. Write in the missing numbers.


74. Write in the missing digits to make this correct.

75. Calculate $\mathbf{8 4 7} \div \mathbf{7}$

1 mark
76. Here is a diagram for sorting numbers.

Write these three numbers in the correct boxes.
You may not need to use all of the boxes.

77.

## Book Sale

Any 3 books for £14.50


Lee bought these three books in the sale for $£ 14.50$

How much money did he save altogether compared to the full price of the books?

78. Calculate $\mathbf{1 0 2 5 - 3 3 6}$


1 mark
79. Calculate $509 \times 24$

80. Here is a sequence of patterns made from squares and circles.

|  | number of squares | number of circles |
| :---: | :---: | :---: |
|  | 1 | 3 |
|  | 2 | 5 |
|  | 3 | 7 |

The sequence continues in the same way.
Calculate how many squares there will be in the pattern which has $\mathbf{2 5}$ circles.

81. Circle three numbers which add to make 190
$\begin{array}{lllll}10 & 30 & 50 & 70 & 90\end{array}$
1 mark
82. Write in the missing number.
83. Plants are sold in trays of $\mathbf{2 0}$


Ivana buys 7 trays of plants.

How many plants is this?


1 mark
David wants 240 plants.
How many trays does he need to buy?


1 mark
84. Here are some number cards.


Use five of the number cards to make this correct.

85. Write in what the missing numbers could be.


1 mark
86.


This is the cost to visit the waxworks.


On Friday morning $\mathbf{1 2}$ adults and $\mathbf{2 0}$ children visit the waxworks.
How much do they pay altogether?


Guide books cost £1.50 each.
The waxworks sells $£ 24$ worth of guide books.
How many guide books is this?


1 mark
87. Write these numbers in the correct places on the Venn diagram.

Some numbers are already placed.

## 99170221


88. Write in the missing number.

89. The rule for this sequence of numbers is 'add 3 each time'.

## $14310 \quad 1316$...

The sequence continues in the same way.
Mary says,
'No matter how far you go there will never be a multiple of 3 in the sequence'.

Is she correct?
Circle Yes or No.
Yes / No
Explain how you know.
$\qquad$
$\qquad$
$\qquad$
90. Write the three prime numbers which multiply to make 231

91. Each card on the left matches one on the right.

Draw lines to match the cards which are equal in value.
One has been done for you.


$$
50 \times 2
$$


$3 \times 30$
$5 \times 20$
$10 \times 4$
92. Write in the missing numbers.

93. Calculate $\mathbf{3 6 9} \mathbf{+ 2 5 1}$

1 mark
94. A shop sells batteries in packs of four and packs of two.


Simon and Nick want two batteries each.
They buy a pack of four and share the cost equally.
How much does each pay?


Mary buys 2 packs of two batteries. Hamid buys 1 pack of four.

How much more does Mary pay than Hamid?

95. Circle two numbers which add to make $\mathbf{0 . 1 2}$
0.1
0.5
0.05
0.7
0.07
0.2

1 mark
96. Leon and Sara each started with different numbers.


Leon


Leon and Sara both get the same answer.
What numbers could they have started with?

97. Circle two different numbers which multiply together to make 1 million.
$\begin{array}{lllll}10 & 100 & 1000 & 10000 & 100000\end{array}$
1 mark
98. Calculate $8.6-3.75$


1 mark
99. Leila knows that

## $65 \times 3=195$

Explain how she can use this information to find the answer to this multiplication:
$165 \times 3$
$\qquad$
100. Draw a line to join two other numbers which have a total of 700


440
475

1 mark
101. Circle the number which is nearest in value to 750
\$
570
699
810
852
1050
102. Write in the missing number.

103. A shop sells postcards in packs of 6 and packs of 8 .


Alan bought $\mathbf{4}$ packs of 8 cards.
How many cards did he get?


1 mark

## Shereen bought some packs of 6 cards.

Altogether she has $\mathbf{3 0}$ cards.
How many packs of 6 did she buy?


1 mark
104. Write two numbers, each greater than 100 , to complete this subtraction.

105.


Chris saves 50p coins.
He has saved 45 of them.
How much money has Chris saved?


1 mark

Michelle has saved $£ 8.40$ in $\mathbf{2 0}$ p coins.
How many 20p coins does Michelle have?

106. Nadia is working with whole numbers.

She says,
'If you add a two-digit number to a two-digit number you cannot get a four-digit number'.

Is she correct? Circle Yes or No. Yes / No

Explain why.
$\qquad$
$\qquad$
$\qquad$
107. Put a tick $(\sqrt{\text { in }}$ in the correct box for each calculation.

Use a calculator.
The first one has been done for you.

|  | less than 1000 | equal to 1000 | more than $1000$ |
| :---: | :---: | :---: | :---: |
| $8.9 \times 9.9 \times 11.9$ |  |  | $\checkmark$ |
| $(786-387) \div 0.41$ |  |  |  |
| $95.4+(91 \times 9.95)$ |  |  |  |
| $12.5 \times(21.1+58.9)$ |  |  |  |

108. $\boldsymbol{n}$ stands for a number.

Complete this table of values.

109. Write in the missing numbers.

110. Write two more numbers in this diagram so that the total of all the numbers is 1000.

111. Rob has some number cards.


He holds up a card.
He says,
'If I multiply the number on this card by 5 , the answer is 35 '.
What is the number on the card?


1 mark

He holds up a different card.
He says,
'If I divide the number on this card by 6, the answer is 4'.
What is the number on the card?


1 mark
112. A shop sells flowers.


## Daffodils

$99 p$ for a bunch


Roses
40p each

John buys 3 bunches of daffodils.
How much does he pay altogether?


1 mark

Karpal has $£ 4.00$ to spend on roses.
How many roses can she buy for $£ 4.00$ ?


1 mark
113. Calculate $\mathbf{4 3 8} \mathbf{- 2 9 6}$


1 mark
114. Five children collect money to plant trees.


Here is a bar chart of the amounts they have raised so far.


Their target is $£ 40$ altogether.
How much more money do they need to reach the target?


2 marks
115. Parveen buys 3 small bags of peanuts.


She gives the shopkeeper $£ 2$ and gets 80p change.

What is the cost in pence of one bag of peanuts?

116. Calculate $549 \times 6$
117. Eggs are put in trays of 12.


The trays are packed in boxes.


## Each box contains 180 eggs.

How many trays are in each box?

118. Circle the two numbers which add up to 1 .
\$
0.1
0.65
0.99
0.45
0.35

1 mark
119. Calculate $268 \times 53$

120. Write in what the missing numbers could be.


1 mark

1 mark
121. Circle two numbers which add up to 150.

| 63 | 64 | 65 | 66 | 67 |
| :---: | :---: | :---: | :---: | :---: |
| 73 | 74 | 75 | 76 | 77 |
| 83 | 84 | 85 | 86 | 87 |
| 93 | 94 | 95 | 96 | 97 |

122. Millie and Ryan play a number game.

What's my number?


Is it under 20 ?
Is it a multiple of 3 ?
Is it a multiple of 5 ?


Yes
Yes
Yes

What is the number?


1 mark

They play the game again.


Is it under 20?
Is it under $25 ?$

Is it odd?
Is it a prime number?
What is the number?


No
Yes
Yes
Yes


1 mark
123. Write in the four missing digits.

Put one digit in each box.

124. Write the number that is nearest to 5000 which uses all the digits $4,5,6$ and 7 .

125. The same number is missing from each box.

Write the same missing number in each box.

126.


Nicola has $£ 50$.
She buys 3 flowerpots and a spade.
How much money does she have left?


Seeds are $£ 1.45$ for a packet.


Steffan has $£ 10$ to spend on seeds.
What is the greatest number of packets he can buy?


1 mark
127. A shop sells sheets of sticky labels.

On each sheet there are $\mathbf{3 6}$ rows and $\mathbf{1 8}$ columns of labels.


How many labels are there altogether on 45 sheets?

128. Write in the missing number.

129. Each side of this square must add up to 80.

Write in the missing numbers.

| 30 | 40 |  |
| :--- | :--- | :--- |
|  |  | 50 |
| 20 | 40 | 20 |

130. Write in the missing number.
$12 \times \square=36$
131. Three children start with 50 p each.


Charlie


Charlie gives Susan 15p.
How much do Charlie and Susan each have now?


1 mark

Peter gives half of his 50 p to Susan.
How much does Peter have left?


1 mark
132.


Some children go camping.
It costs $£ 2.20$ for each child to camp each night.
They go for 6 nights.

How much will each child have to pay for the $\mathbf{6}$ nights?


There are $\mathbf{7 0}$ children.
Each tent takes up to 6 children.
What is the least number of tents they will need?

133. Calculate $58 \times 6$


1 mark
134. Calculate 808 - 512


1 mark
135. Shenaz buys a pack of $\mathbf{2 4}$ cans of cola for $\mathbf{£ 6 . 0 0}$


What is the cost of each can?

136. Calculate

137. Write in what the missing numbers could be.


Write in the missing number.

138. The three missing numbers are each greater than zero.

Write in what the missing numbers could be.

139. One length of a swimming pool is $\mathbf{2 5}$ metres.


How many lengths are there in a 150 metre race?


Six children swim a 50 metre race.

| Lane | Name | Time in Seconds |
| :---: | :---: | :---: |
| 1 | Bryn | 92.4 |
| 2 | Craig | 86.3 |
| 3 | Fiona | 90.4 |
| 4 | Harun | 85.1 |
| 5 | Jody | 84.7 |
| 6 | Dean | 89.2 |

Who finished first?
$\qquad$

How many seconds faster was Dean than Fiona?


1 mark
140. Circle one number on the grid which can be divided by 9 with a remainder of 1 .

| 97 | 98 | 99 |
| :---: | :---: | :---: |
| 107 | 108 | 109 |
| 117 | 118 | 119 |

141. Write in the missing number.

$$
568.1 \div \square=24.7
$$

142. Here is a picture of three people.


Lisa's height is half-way between Julie's height and Tom's height.

## Calculate Lisa's height.


143. Every day a machine makes $\mathbf{1 0 0} \mathbf{0 0 0}$ paper clips which go into boxes.


A full box has $\mathbf{1 2 0}$ paper clips.
How many full boxes can be made from $\mathbf{1 0 0} \mathbf{0 0 0}$ paper clips?


Each paper clip is made from 9.2 centimetres of wire.


What is the greatest number of paper clips that can be made from $\mathbf{1 0}$ metres of wire?


| 84 | 85 | 86 |
| :---: | :---: | :---: |
| 91 | 92 | 93 |
| 98 | 99 | 100 |
| 105 | 106 | 107 |

145. Write the missing number.


1 mark
146. A number multiplied by itself gives the answer 49.

Circle the number.
2
3
4
5
6
7
89
147. Emma buys these three jars of jam.


What is the total cost of the three jars?


1 mark

Jack buys one jar of cherry jam for 82p.


He pays with a £5 note.
How much change does he get?

148. Write what the two missing digits could be.

149. There are $\mathbf{1 2}$ pencils in a box.


## A school buys 24 boxes.



How many pencils does the school buy?

150. In the chart any three numbers in a line, across or down, have a total of 18.45 Write the missing number.

151. Write what the four missing digits could be.

152. Kim knows that

## $137 \times 28=3836$

Explain how she can use this information to work out this multiplication.
$138 \times 28$
$\qquad$
$\qquad$
$\qquad$
153. Write what the three missing numbers could be.


Write what the two missing numbers could be:

$$
80-\square-\square=25
$$

154. Write what the missing numbers could be.
$\square$ is an odd number, and is greater than 15.
$\square$ is a number greater than 100 and can be divided by 4 , with no remainder.
155. Write what the two missing numbers could be.


Write what the two missing numbers could be.


Write the missing number.

$$
30-16=9+\square
$$

156. Sima thinks of a number.

She divides it by 12. Her answer is 26.
What is the number Sima thinks of?
157. Write the missing number.


1 mark
158. Write the three missing digits.



[^0]:    2 marks

