

Autumn progress check

# Year 3

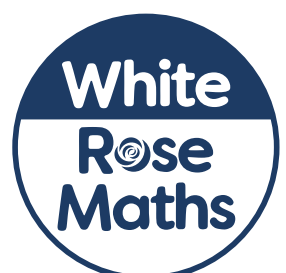
## Mathematics

### Paper 2: reasoning and problem solving

First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
Teacher						

This progress check has been designed by White Rose Maths.  
For more information, please visit [whiterosemaths.com](http://whiterosemaths.com)

ISBN 978-1-80478-015-2



**BLANK PAGE**

Please do not write on this page.

# Instructions

You **may not** use a calculator to answer any questions in this paper.

## Questions and answers

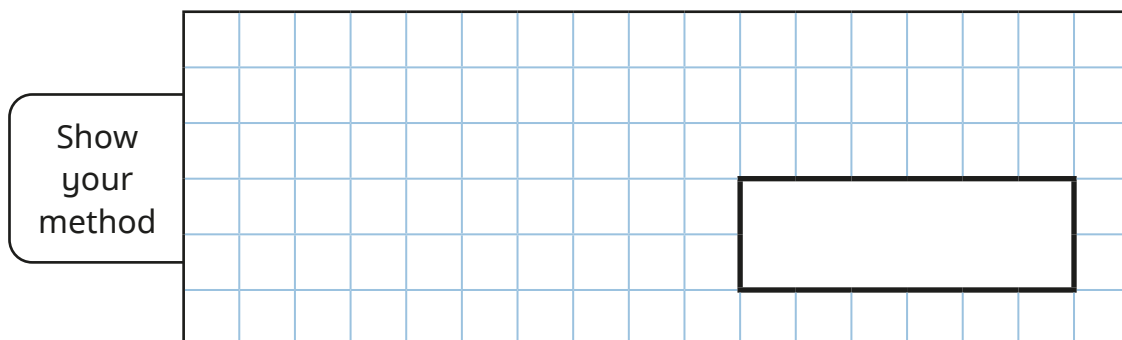
You have **50 minutes** to complete this paper.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

If you need to do working out, you can use the space around the question.

**Some questions have a method box like this:**



For these questions you may get a mark for showing your method.

If you cannot do one of the questions, **go on to the next one.**

You can come back to it later, if you have time.

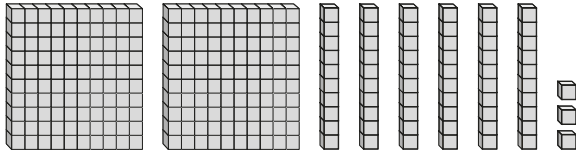
If you finish before the end, **go back and check your work.**

## Marks

The number under each line at the side of the page tells you the maximum number of marks for each question.

1

Eva makes this number.



Write Eva's number in numerals.

1 mark

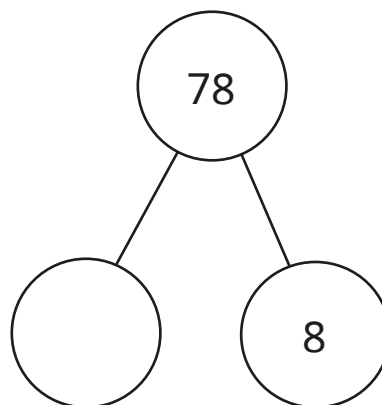
Write Eva's number in words.

---

1 mark

2

Complete the part-whole model.



1 mark

**3**

Amir is shading multiples of 4

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Which two numbers has he missed?

and

---

1 mark

**4**

Dexter is using place value counters to represent a number.

Hundreds	Tens	Ones
100	10 10	1 1 1 1

Write Dexter's number in words.

---

1 mark

Dexter adds these counters to the chart.



What is Dexter's new number?

1 mark

**5**

Circle all the multiples of 2

3            12            21            30

1 mark

Circle all the multiples of 5

9            15            60            71

1 mark

**6**

Write these numbers in order from smallest to greatest.

413

430

130

134

500

---

1 mark

**7**

Alex is counting up in 100s from 0

Circle the numbers that she will say.

**400**

**280**

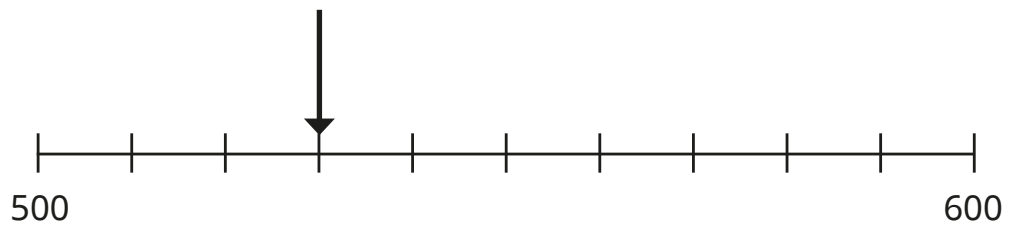
**150**

**700**

1 mark

8

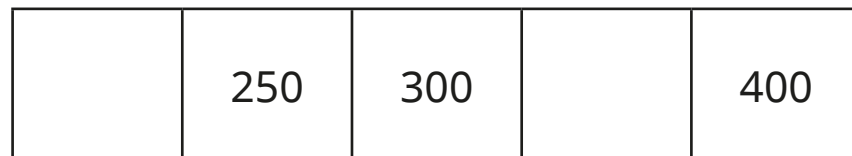
What number is the arrow pointing to?



1 mark

9

Complete the number track.

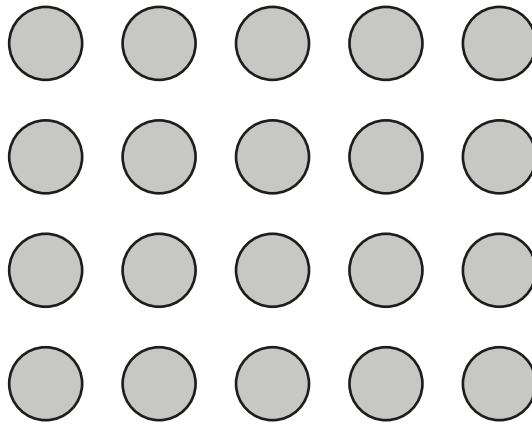


1 mark



10

Ron has made an array using counters.



Complete the sentence.

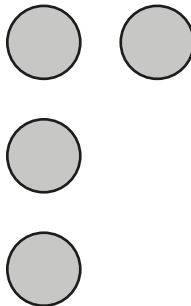
Ron has made

equal groups of

1 mark

Dora has started making an array with 12 counters.

Finish Dora's array.



1 mark

**11**

Rosie and Mo are both estimating the answer to  $398 - 101$

Rosie says, "The answer is about 300"

Mo says, "The answer is about 200"

Whose estimate is better?

Circle your answer.

**Rosie**

**Mo**

Explain your choice.

---

1 mark

**12**Annie is calculating  $568 - 99$ 

Annie says, "First I am going to subtract 100 from 568"

What does Annie need to do next?

Tick the correct box.

add 1

subtract 1

add 99

subtract 99

1 mark

**13**

Complete the number sentences.

$$7 \times 3 = 5 \times 3 + \boxed{\phantom{00}} \times 3$$

1 mark

$$9 \times 2 \times \boxed{\phantom{00}} = 9 \times 4$$

1 mark

**14**

Fill in the missing numbers.

 more than 201 is 301

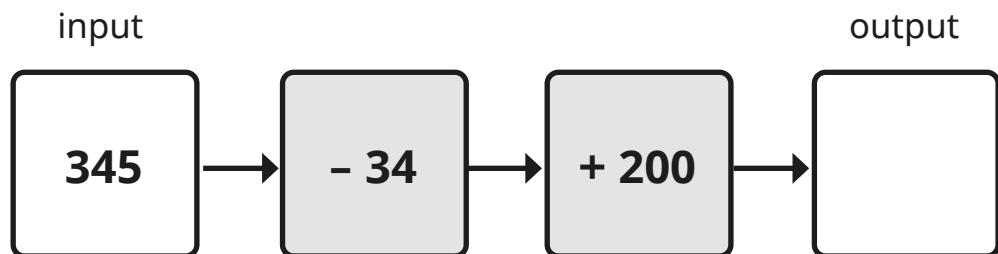
1 mark

10 less than  is 95

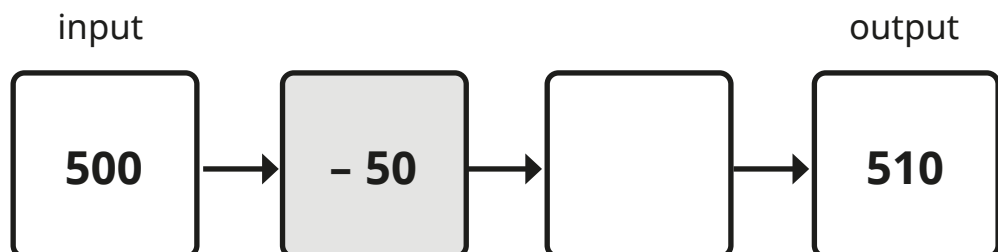
1 mark

**15**

Complete the function machines.



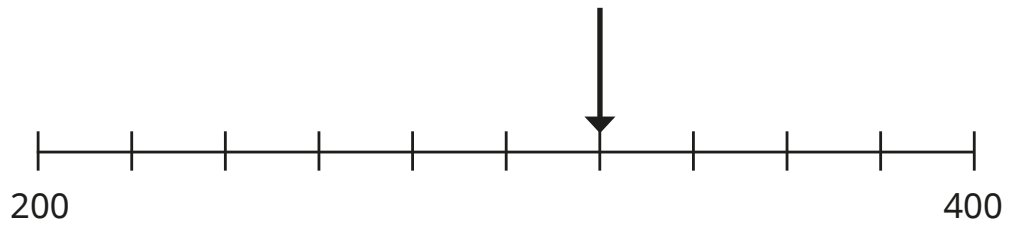
1 mark



1 mark

16

What number is the arrow pointing to?



1 mark

17

Circle the multiple of 8

104

107

Explain your reasoning.

1 mark

18

Tommy has 254 stickers.

He is given 179 more stickers.

How many stickers does he have now?

1 mark

Write a subtraction to check your answer.

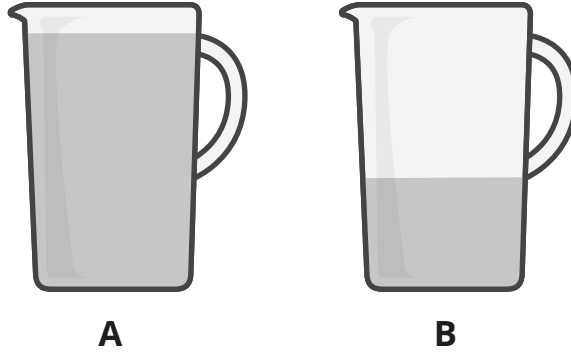
1 mark

19

Jug A has 490 ml of juice.

Jug B has 220 ml of juice.

150 ml of juice is poured from jug A into jug B.



Which jug now contains more juice?

Show  
your  
method

A large grid for showing the method to solve the problem. The grid is 20 units wide and 20 units high. A small rectangular box is drawn in the bottom right corner of the grid, spanning 4 units in width and 2 units in height.

2 marks

20

Dani is putting sweets into party bags.  
She puts 3 sweets in each bag.  
She uses 27 sweets in total.

How many bags does she fill?

1 mark

Dani wants to put 8 stickers into each party bag.  
She has 50 stickers.

How many more stickers does she need?

1 mark

END OF PAPER