

2022 national curriculum tests

# Key stage 1

## Mathematics

### Paper 2: reasoning

First name	
Middle name	
Last name	

Total marks	
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**Ajay**



**Amy**



**Ben**



**Kemi**

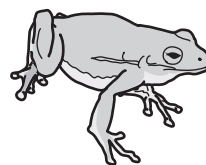
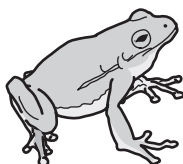
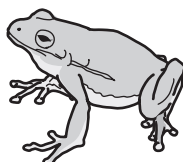
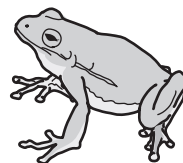
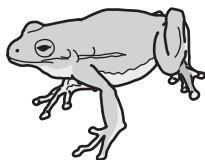
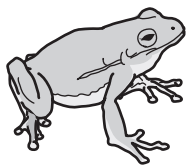


**Sam**




**Sita**

## Practice question



frogs

1



Ajay **5** blue cars

Kemi **14** red cars

Ajay and Kemi are shown as line drawings of children. Ajay is on the left and Kemi is on the right. They are both wearing polo shirts. Ajay's speech bubble says "5 blue cars" and Kemi's speech bubble says "14 red cars".

cars



1 mark

2

two-digit number

less than 20

even number



1 mark

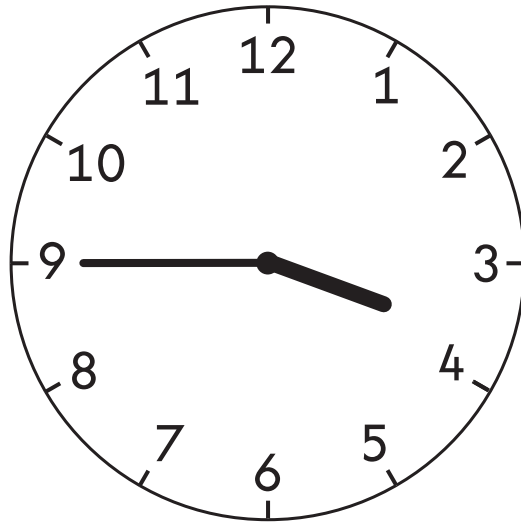
3

60



1 mark

4



Tick **one**.

quarter to 9

quarter to 4

quarter past 9

quarter past 4



1 mark

5

12

sweets



1 mark

6

Match each label to the correct part of the date.

One is done for you.

**date**

Tuesday	28th	April	2020
---------	------	-------	------

**label**

day of the month	day of the week	year	month
------------------	-----------------	------	-------

The diagram shows a date 'Tuesday 28th April 2020' and a list of labels: 'day of the month', 'day of the week', 'year', and 'month'. A line connects '28th' to 'day of the month'.



1 mark



**7** Put these numbers in order from smallest to largest.

One is done for you.

76

84

27

45

~~18~~

18

**smallest**

**largest**

1 mark

8

Kemi has **25** red beads and **6** green beads.

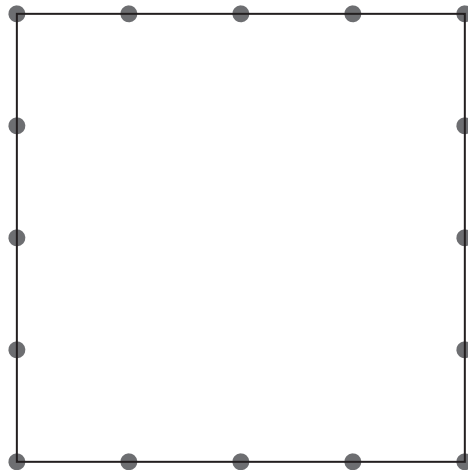
How many beads does Kemi have **altogether**?



1 mark

9

Draw **two lines** to divide the square into **quarters**.



1 mark

10

Ben has **20** stickers.

Sam has **30** stickers.

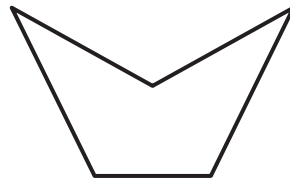
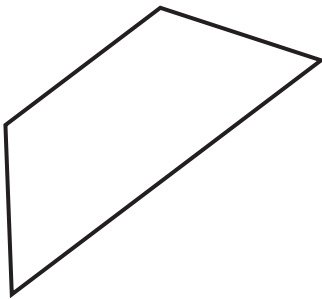
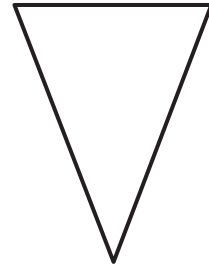
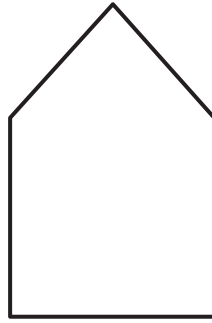
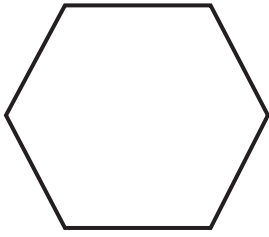
Ajay has **50** stickers.

How many stickers do they have **altogether**?



1 mark

**11** Tick the **two** shapes that have the same number of sides.



1 mark

**12**

This number sentence equals 18

$$\boxed{1} + \boxed{1} \boxed{7} = \boxed{1} \boxed{8}$$

Now write a **different** number sentence that equals 18Write **one digit** in each empty box.

$$\boxed{\phantom{0}} + \boxed{1} \boxed{\phantom{0}} = \boxed{1} \boxed{8}$$

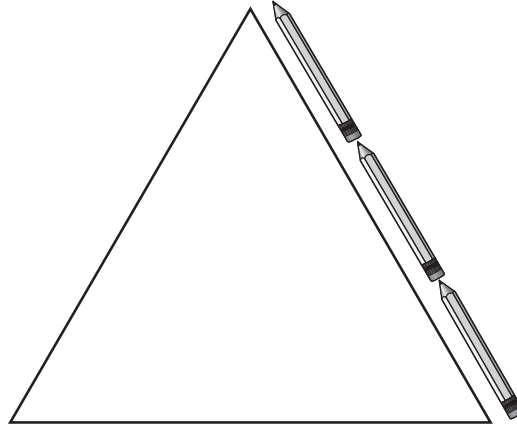


1 mark

13

This triangle has three sides of **equal length**.

Three pencils fit along one side of the triangle.



How many pencils fit around **all three sides** of the triangle?

 pencils

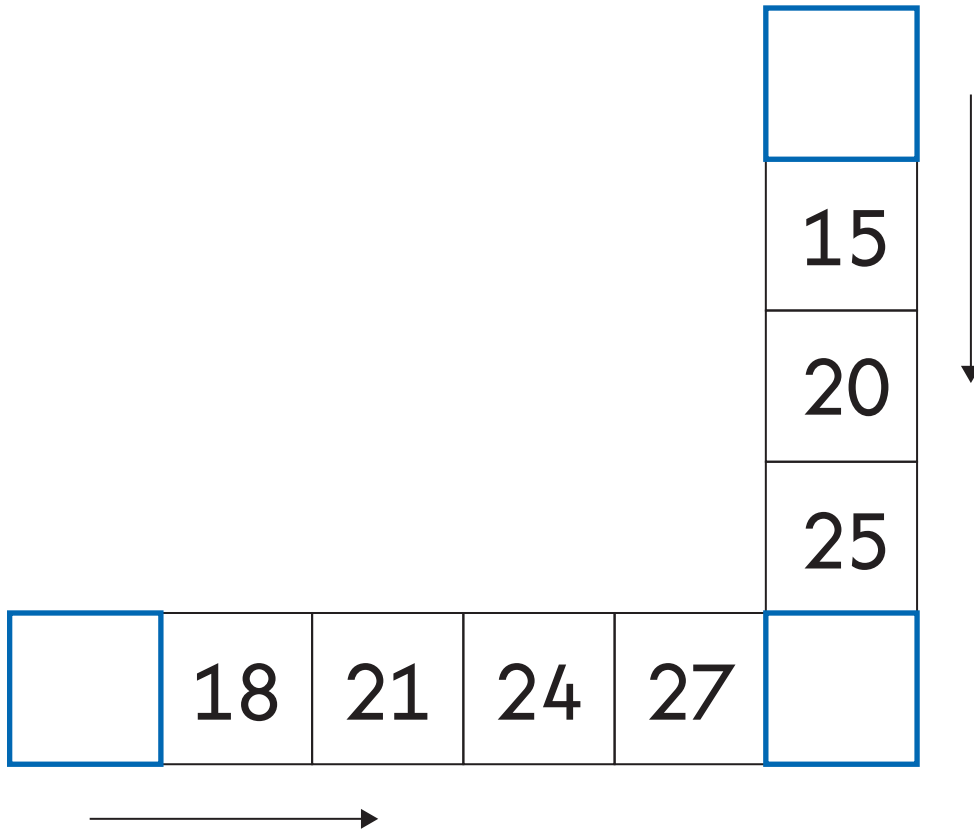
1 mark

14

Here are two number patterns.

There are **three** missing numbers.

Write them in the empty boxes.







2 marks

15

Draw a line to match each measurement to the correct unit.

One is done for you.

measurement	unit
 the <b>length</b> of a pencil	kg
 the <b>mass</b> of a bag of potatoes	°C
 the <b>capacity</b> of a cup	cm
 the <b>temperature</b> outside	ml

A line is drawn from the pencil measurement box to the cm unit box.



1 mark



**16**

Complete the table to show how many tens and ones are in each number.

One is done for you.

<b>Number</b>	<b>Tens</b>	<b>Ones</b>
<b>87</b>	<b>8</b>	<b>7</b>
<b>23</b>		
<b>5</b>		



1 mark

**17**

Look at these numbers.

36
----

42
----

6
---

Use these numbers to complete the number sentences below.

Use all three numbers each time.

	+		=	
--	---	--	---	--

	-		=	
--	---	--	---	--



1 mark

18

Ben has **40** cards.

He shares them equally between  
**4** party bags.



How many cards does he put in each bag?

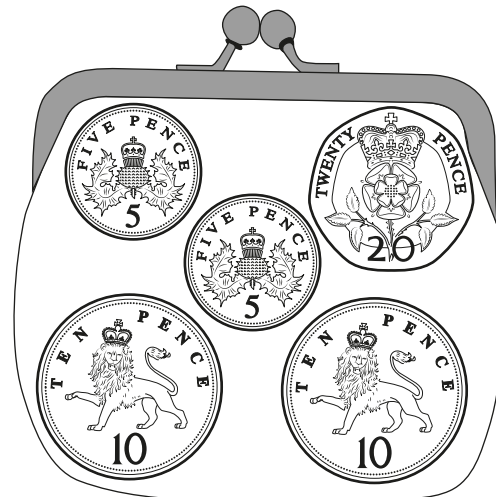
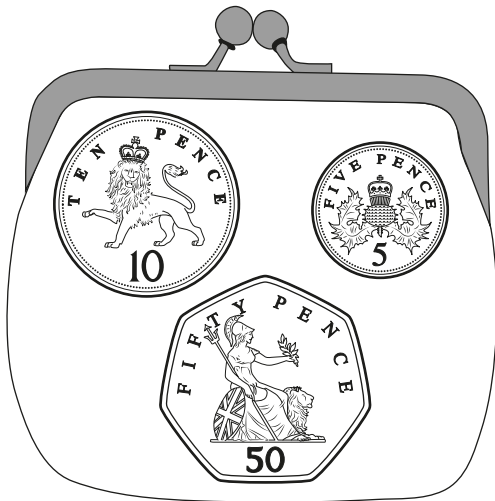
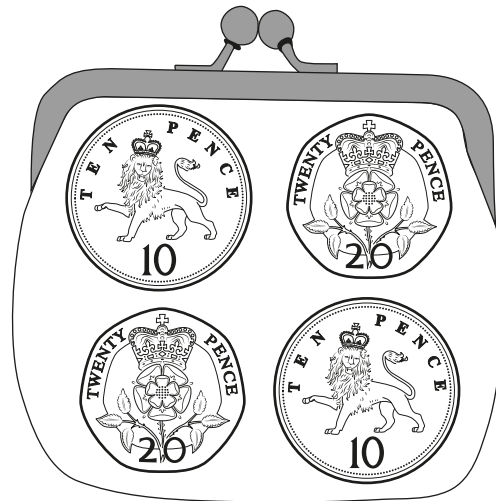
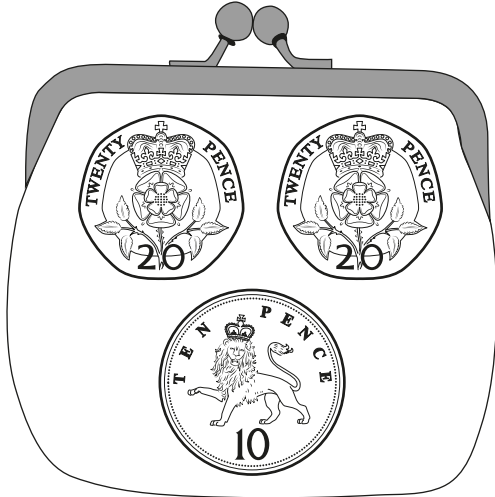


1 mark

19

Two of these purses have the **same amount** of money.

Tick them.



1 mark

20

Circle the calculation with the largest answer.

$5 + 2$

$10 - 3$

$9 - 1$

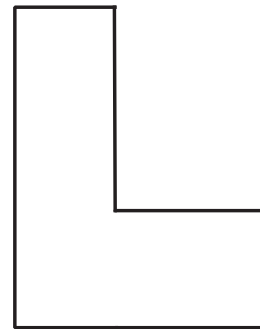
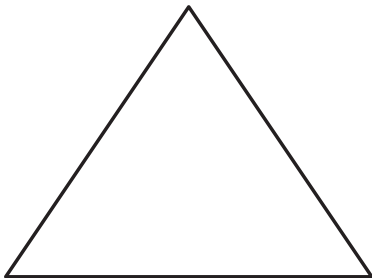
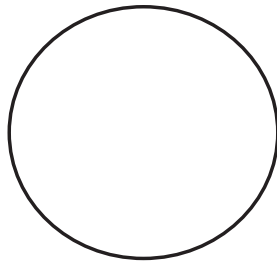
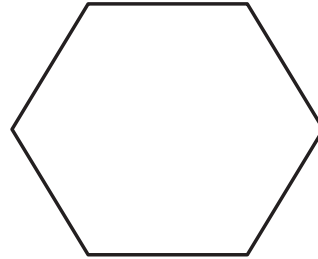
$4 + 1$



1 mark

21

Draw a cross on the shape that does **not** have a line of symmetry.



1 mark

22



A wall has **5** bricks in each row.

How many bricks are there in **6** rows?

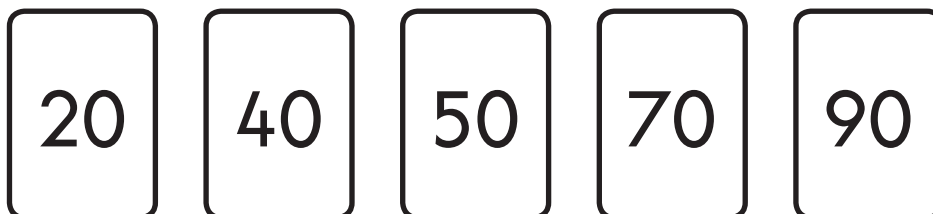
bricks



1 mark

23

Look at these number cards.



Choose **three** of the number cards to make this subtraction correct.

-  =



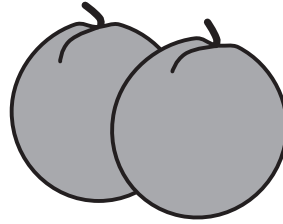
1 mark

24

8 children are eating plums.

Each child eats 2 plums.

How many plums do they eat **altogether**?



1 mark

25

Sam puts 18 cards in rows.

He puts 3 cards in each row.

How many **rows** of cards are there?



1 mark



26

There are **43** people on a bus.

**15** people get off.

**8** people get on.



How many people are on the bus **now**?

Show  
your  
working

people



2 marks

27 Complete the number sentences.

$$\boxed{7} + 7 = 14$$

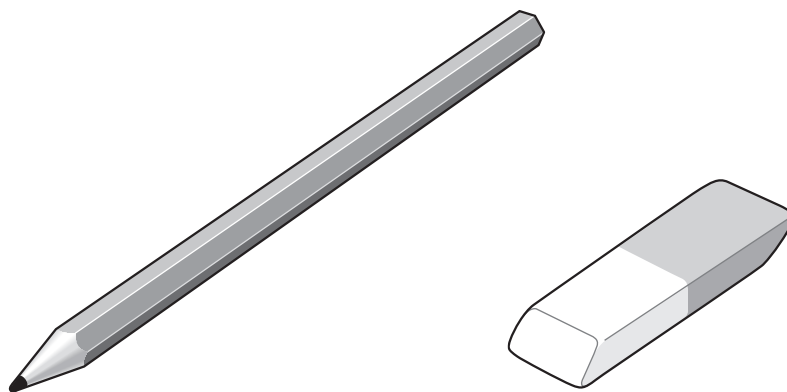
$$\boxed{\phantom{00}} + 7 = 24$$

$$\boxed{27} + 7 = \boxed{\phantom{00}}$$

$$\boxed{\phantom{00}} + 7 = 44$$



1 mark



pencil  
15p

rubber  
25p

Kemi has **£1**

She buys a **pencil** and a **rubber**.

How much **change** does Kemi get from **£1**?

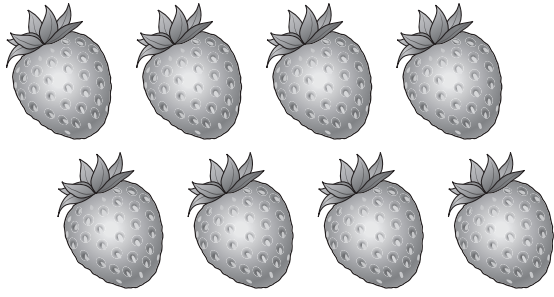
Show  
your  
working

p



2 marks

29



Sita has **8** strawberries.

She eats  $\frac{3}{4}$  of them.

How many does she eat?

strawberries



1 mark

30

This table shows the shoe sizes of all the children in a class.

Shoe size	Number of children
9	7
10	8
11	12
12	2

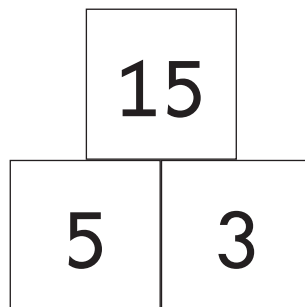
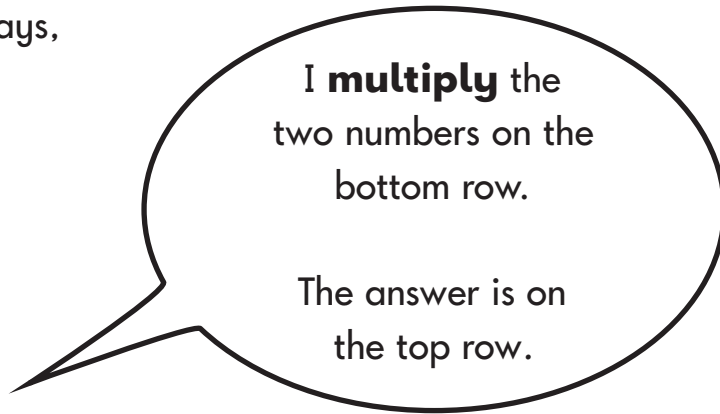
How many children have a shoe size of **10 or smaller**?



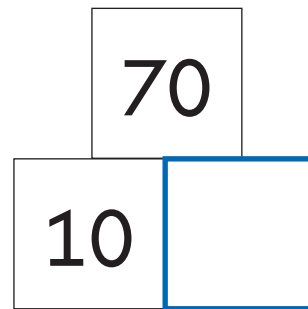
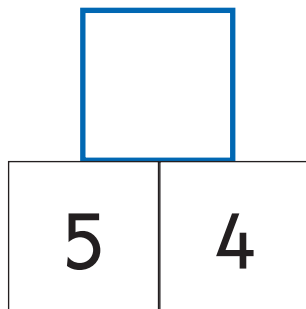
1 mark

31

Kemi says,



Write the **two** missing numbers below.



2 marks

End of test

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2022 key stage 1 mathematics

Paper 2: reasoning

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