

Ma

YEAR

7

LEVELS

3–4

2007

# Mathematics test

## Paper 1

Calculator **not** allowed

First name \_\_\_\_\_

Last name \_\_\_\_\_

School \_\_\_\_\_

### Remember

- The test is 45 minutes long.
- You **must not** use a calculator for any question in this test.
- You will need: pen, pencil, rubber and a ruler.
- This test starts with easier questions.
- Try to answer all the questions.
- Write all your answers and working on the test paper – do not use any rough paper. Marks may be awarded for working.
- Check your work carefully.
- Ask your teacher if you are not sure what to do.

For marker's use only

TOTAL MARKS	
-------------	--

## Instructions

### Answers



This means write down your answer or show your working and write down your answer.

### Calculators



You **must not** use a calculator to answer any question in this test.

1

Look at the information about recycling places in one town.

Recycling place	Glass	Cans	Plastic	Paper	Clothes	Shoes
Supermarket A	✓	✓		✓	✓	✓
Supermarket B	✓					
Supermarket C	✓	✓	✓			✓
Car park D	✓			✓	✓	
Car park E	✓	✓				
Road F	✓	✓		✓		

(a) How many of these places recycle **paper**?



\_\_\_\_\_

1 mark

(b) One of these places recycles **plastic**.

Which place is this?



\_\_\_\_\_

1 mark

(c) Molly wants to go to **one** of the places to recycle **cans and clothes**.

Which place should she go to?



\_\_\_\_\_

1 mark



2

Here are three numbers.

7

8

25

(a) What is the **sum** of the three numbers?



---

---

1 mark

(b) What is the **difference** between the **largest** number and the **smallest** number?



---

---

1 mark

(c) Write a calculation using **all three numbers** that gives the **answer 10**



---

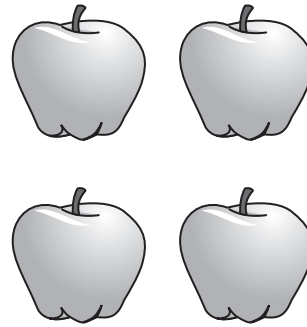
1 mark

- 3 (a) Jack buys **four** apples.

He pays with a **£2** coin.

He gets **£1.20** change.

How much does **one** apple cost?

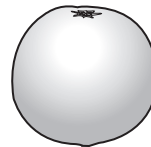


\_\_\_\_\_ p

1 mark

- (b) Oranges cost **15p** each.

Raj has a **£1** coin.



What is the greatest number of oranges Raj can buy with £1?



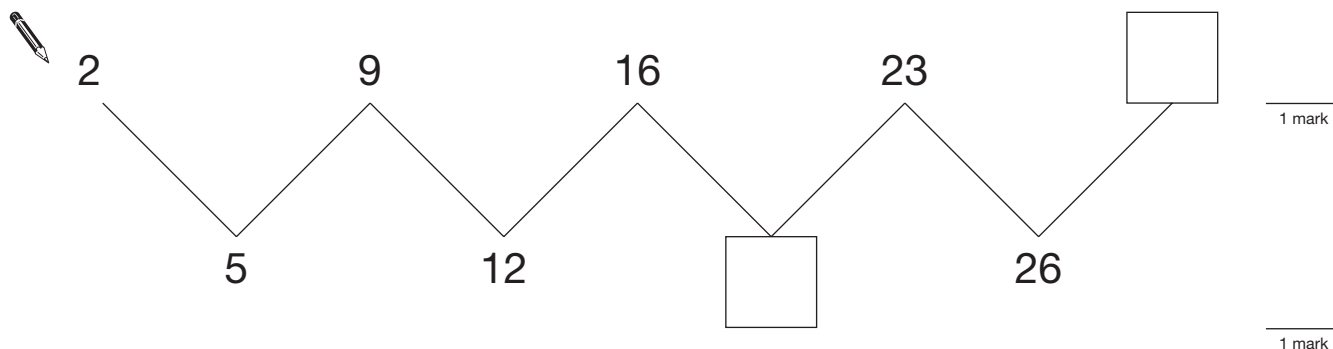
\_\_\_\_\_ oranges

1 mark



4 Look at this number sequence.

Write the missing numbers in the boxes.



5 Molly wants to decorate some cakes.

Each cake will have **3 cherries**.



Molly has **48 cherries**.

How many cakes can she decorate?



\_\_\_\_\_

1 mark

6

Calculate the following.

$$347 + 62 =$$



---

---

1 mark

$$154 - 81 =$$



---

---

1 mark

$$74 \times 5 =$$



---

---

1 mark

$$378 \div 3 =$$



---

---


1 mark

7

Look at these statements about **rectangles**.

For each statement, tick (✓) True or False.

The first one is done for you.

	True	False
All rectangles have four sides.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
 All rectangles have four equal sides.	<input type="checkbox"/>	<input type="checkbox"/>
Some rectangles have no right angles.	<input type="checkbox"/>	<input type="checkbox"/>
All rectangles have at least one line of symmetry.	<input type="checkbox"/>	<input type="checkbox"/>

---

1 mark



- 8 (a)  $32 + 47$  is **bigger** than  $32 + 43$

How much bigger?



\_\_\_\_\_

1 mark

- (b)  $7 \times 9$  is **bigger** than  $6 \times 9$

How much bigger?



\_\_\_\_\_

1 mark

- 9 Write the missing numbers.



\_\_\_\_\_ =  $\frac{1}{2}$  of 16

1 mark

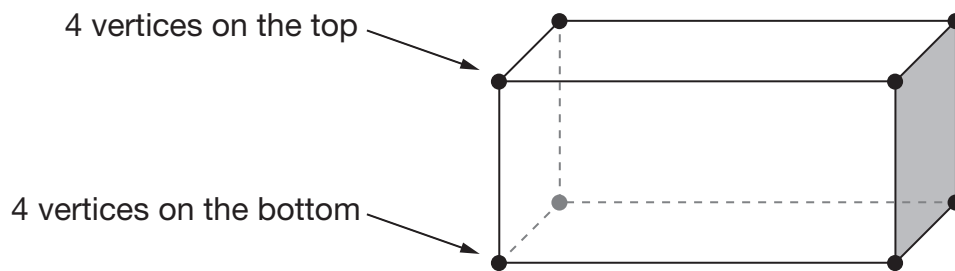
double \_\_\_\_\_ =  $\frac{1}{2}$  of 16

1 mark



10

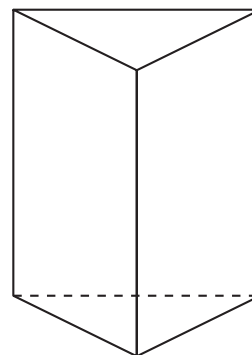
A cuboid has **8 vertices**.



- (a) How many vertices does this 3-D shape have?



\_\_\_\_\_



1 mark

- (b) A different 3-D shape has **8 vertices**.  
It has **6 faces**. Each face is the **same**.

Put a ring round the correct name for this 3-D shape.



square

pyramid

cylinder

cube

rectangle

1 mark

- 11 (a) Which number is **closer to 100**?

Put a ring round it.



68

133

Explain how you know.



1 mark

- (b) Which number is **closest to 10**?

Put a ring round it.



-5

16

-9

0

1 mark

- (c) Which number is **closest to 1**?

Put a ring round it.



1.4

1.35

0

1.65

1 mark



12

The table shows the times that street lights come on one night and go off the next morning.

City	Time the lights come <b>on (pm)</b>	Time the lights go <b>off (am)</b>
Belfast	6:45	6:13
Glasgow	6:40	6:05
London	6:21	5:51
Manchester	6:30	5:59
Newcastle	6:28	5:55

(a) Complete the sentence below.



In **Manchester**, the lights come **on** 15 minutes earlier than they do in \_\_\_\_\_

1 mark

(b) In **Glasgow**, the lights go **off** later than they do in **Newcastle**.

How much later?



\_\_\_\_\_ minutes

1 mark

(c) In **Ashford** the lights come **on** at **6:20pm**.

The lights go off **11 $\frac{1}{2}$  hours later**.

Complete the table below.



City	Time the lights come <b>on (pm)</b>	Time the lights go <b>off (am)</b>
Ashford	6:20	_____ : _____

1 mark

- 13 (a) Write a number that is **both**

greater than 10

and

a multiple of 4



\_\_\_\_\_

1 mark

- (b) Now write a number that is **both**

greater than 10

and

a square number



\_\_\_\_\_

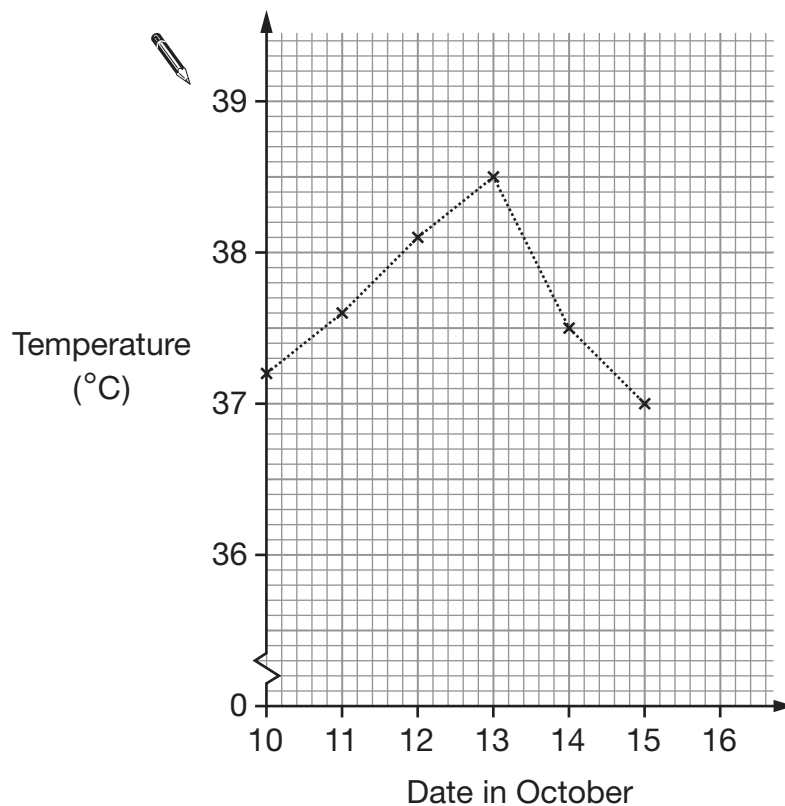
1 mark



14

In October, Jack was ill.

Here is his temperature chart.



(a) What was Jack's **highest** temperature?



1 mark

(b) On 16th October, Jack's temperature was 36.7°C

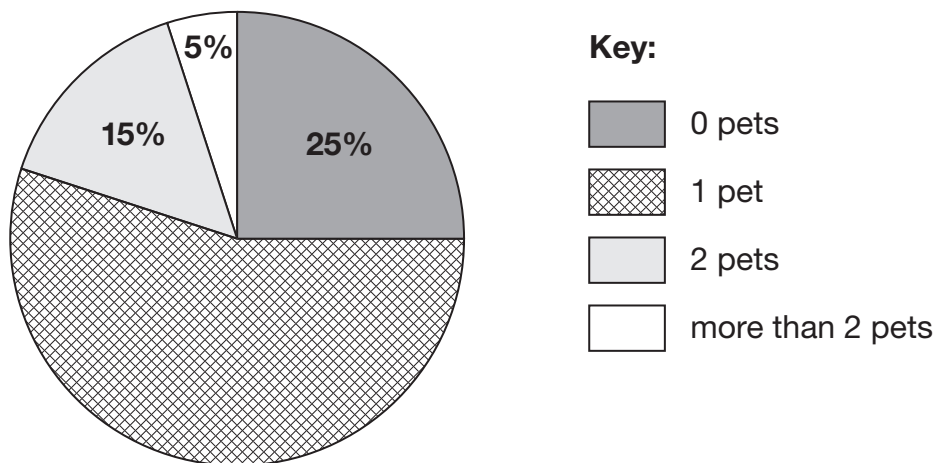
Mark this point on the graph.

1 mark

15

Molly asked the pupils in her class how many pets they had.

She recorded her results on a pie chart.



(a) What percentage of pupils had only **1 pet**?



\_\_\_\_\_ %

1 mark

(b) There are 20 pupils in the class.

How many pupils had **0 pets**?



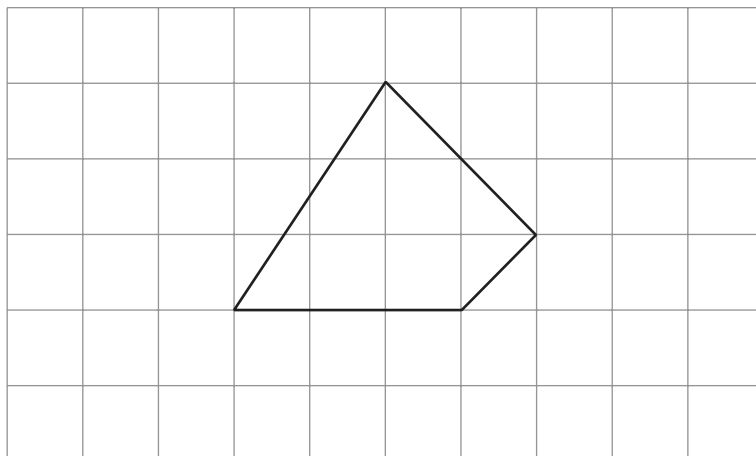
\_\_\_\_\_

1 mark



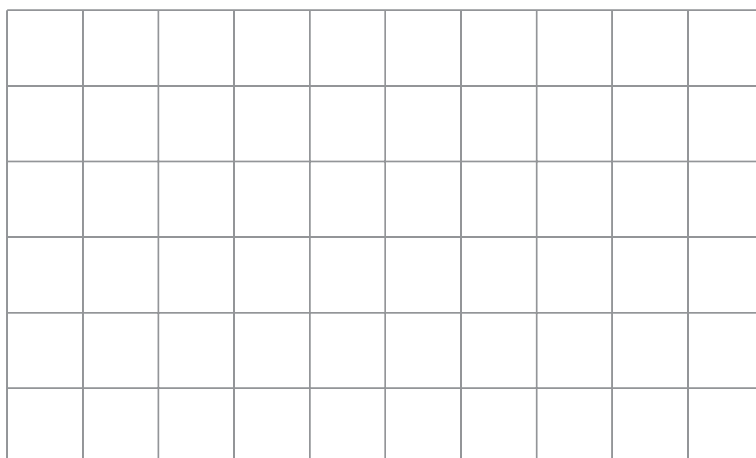
- 16 (a) The shape on the square grid below has **exactly one right angle**.

Mark the right angle on the shape.



1 mark

- (b) Draw a shape on the square grid below that has **exactly two right angles**.



1 mark



17

The rule for this sequence is to **add the same number each time**.

Use this rule to write the missing numbers in the sequence.



3

19

1 mark

18

Here is an equation.

$$x + 30 = 100$$

Raj says that  $x = 130$

Is he correct?

☐

Yes

☐

No

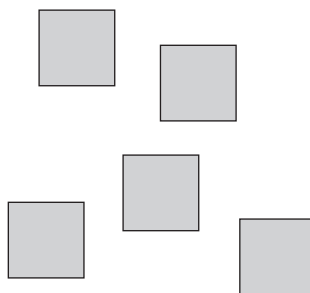
Explain your answer.



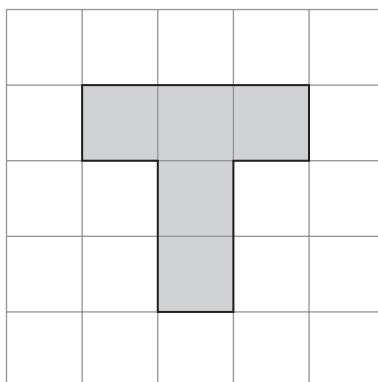
1 mark

19

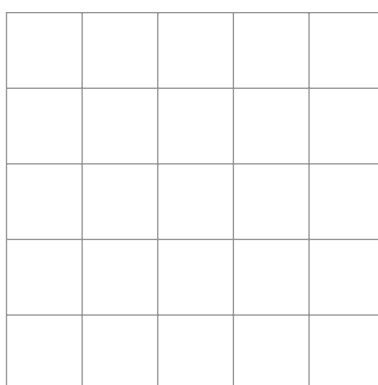
You can make patterns on square grids using **5** square tiles.



This pattern has **one** line of symmetry.



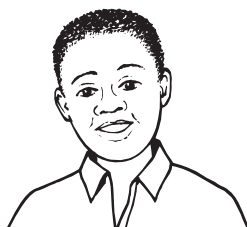
Use **5** square tiles to draw a pattern on the grid below that has **more than one** line of symmetry.



1 mark

20

Jack weighs himself.



44.8kg

Then Jack weighs himself together with his dog.



and



60.4kg

How much does the dog weigh?



kg

1 mark



