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	

Sourced from SATs-Papers.co.uk

http://www.SATs-Papers.co.uk

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.

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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

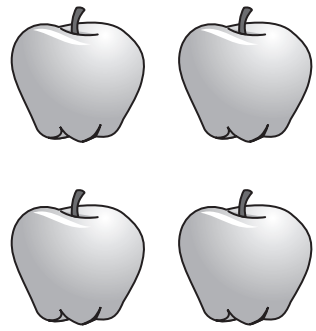
Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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

He pays with a **£2** coin.

He gets **£1.20** change.

How much does **one** apple cost?

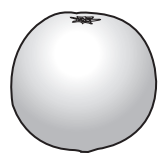


_____ p

1 mark

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

Raj has a **£1** coin.



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

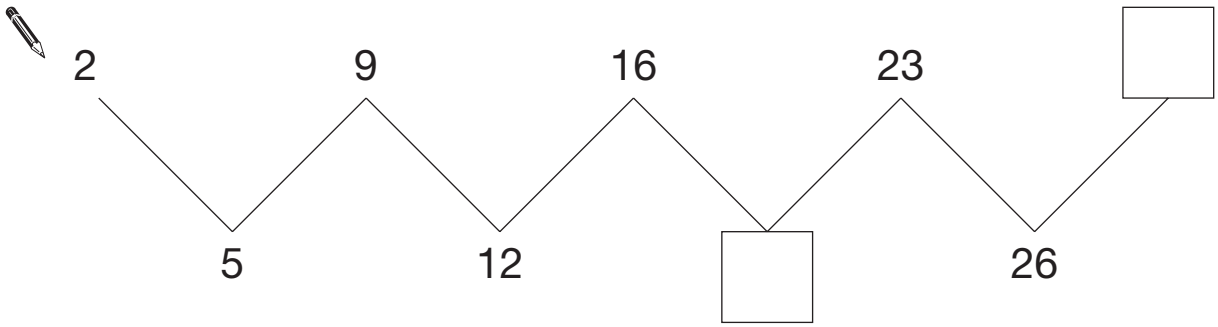
_____ oranges

1 mark

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

4 Look at this number sequence.

Write the missing numbers in the boxes.

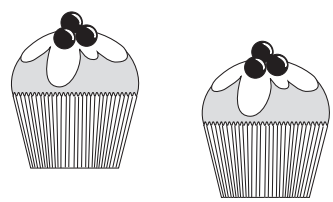


1 mark

1 mark

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

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6 Calculate the following.

347 + 62 =

1 mark

154 – 81 =

1 mark

74 × 5 =

1 mark

378 ÷ 3 =

1 mark

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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.	✓	
All rectangles have four equal sides.		
Some rectangles have no right angles.		
All rectangles have at least one line of symmetry.		

1 mark

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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

How much bigger?

_____ 1 mark

(b) 7 × 9 is **bigger** than 6 × 9

How much bigger?

_____ 1 mark

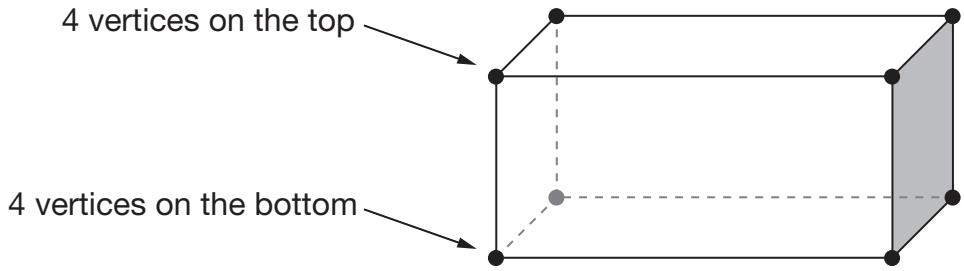
9 Write the missing numbers.

_____ = $\frac{1}{2}$ of 16 1 mark

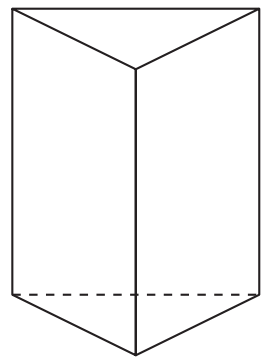
double _____ = $\frac{1}{2}$ of 16 1 mark

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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

City	Time the lights come **on (pm)**	Time the lights go **off (am)**
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 **on (pm)**	Time the lights go **off (am)**
Ashford	6:20	_____ : _____

1 mark

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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**

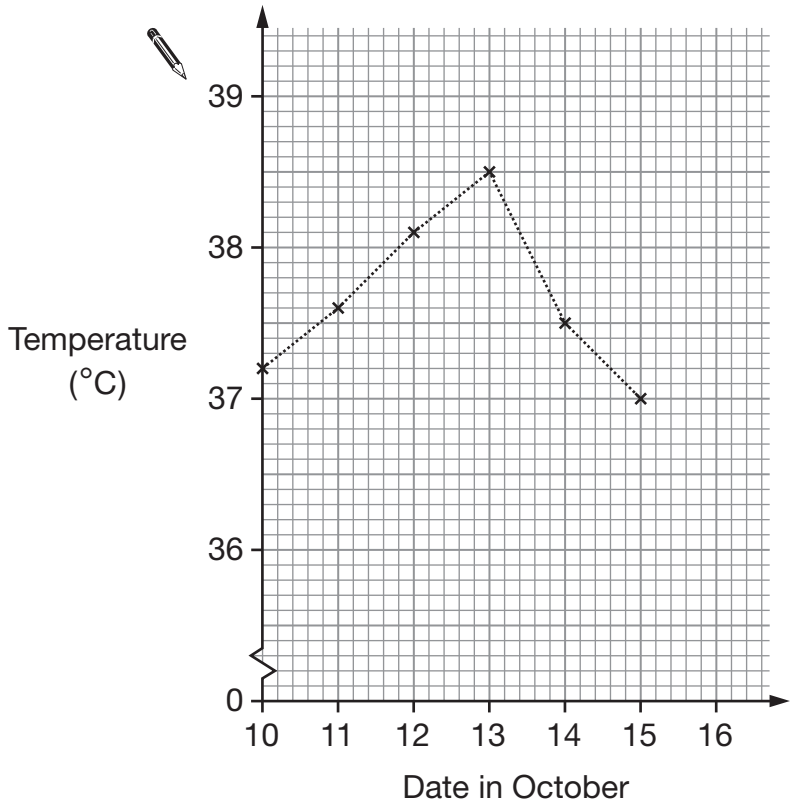
greater than 10 **and** a square number

1 mark

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

14 In October, Jack was ill.

Here is his temperature chart.



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

°C

1 mark

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

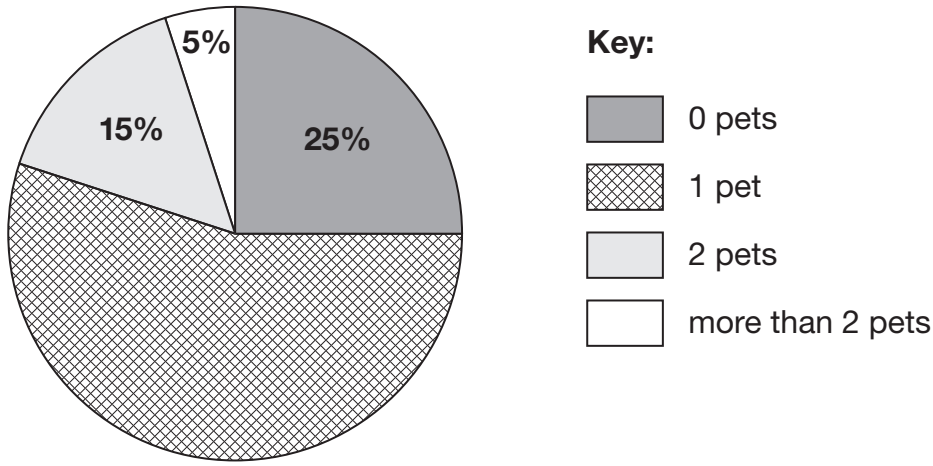
Mark this point on the graph.

1 mark

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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**?

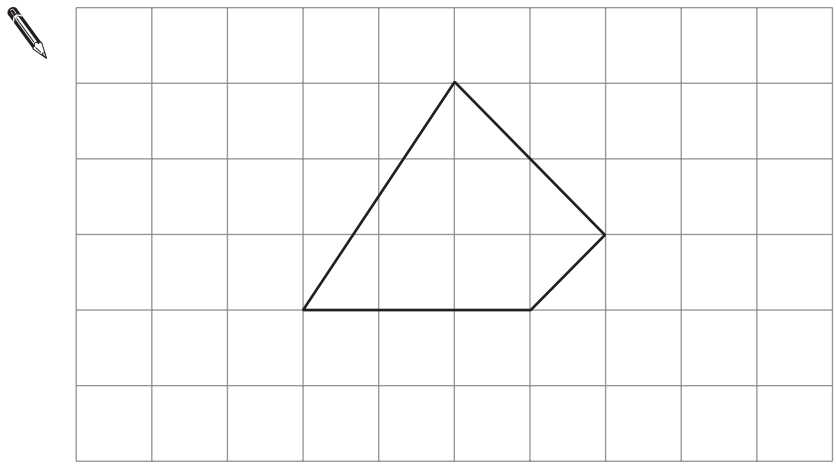
_____

1 mark

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

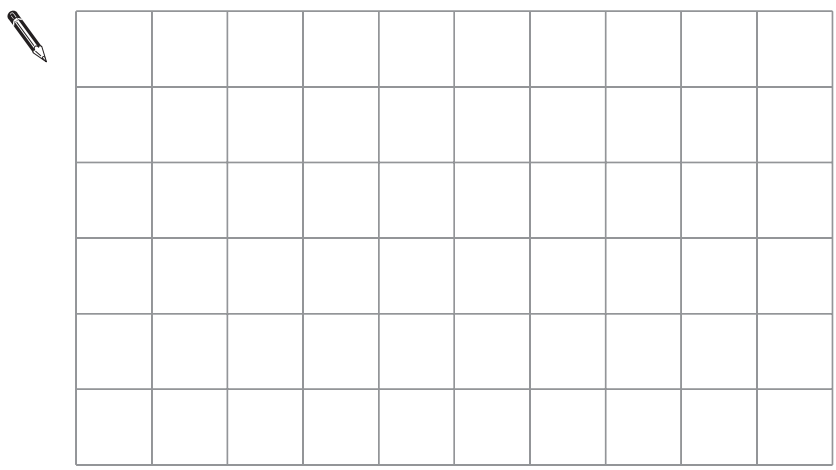
16 (a) The shape on the square grid below has **exactly one right angle**.

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

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

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?

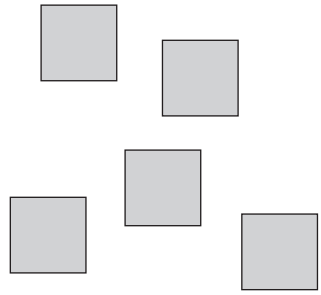
☐ Yes ☐ No

Explain your answer.

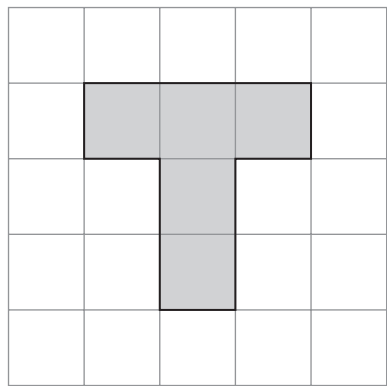
1 mark

Sourced from SATs-Papers.co.uk http://www.SATs-Papers.co.uk

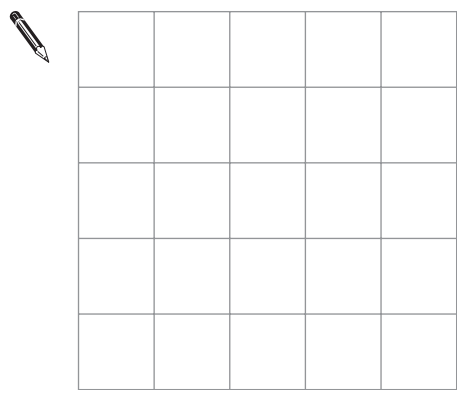
19 You can make patterns on square grids using **5** square tiles.



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

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20 Jack weighs himself.

44.8 kg

Then Jack weighs himself together with his dog.

and

60.4 kg

How much does the dog weigh?

kg

1 mark

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