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Ma

YEAR 7

LEVELS 3–4

2005

Year 7 mathematics test

Paper 2

Calculator allowed

Please read this page, but do not open your booklet until your teacher tells you to start. Write your name and the name of your school in the spaces below.

First name _____

Last name _____

School _____

Remember

- The test is 45 minutes long.
- You **may** use a calculator for any question in this test.
- You will need: pen, pencil, rubber, ruler and a calculator.
- 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	

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Instructions

Answers

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

Calculators

You **may** use a calculator to answer any question in this test.

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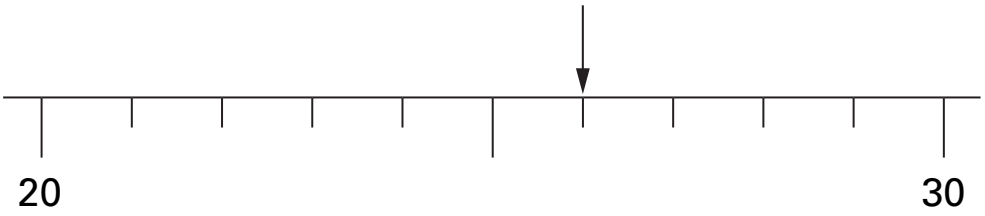
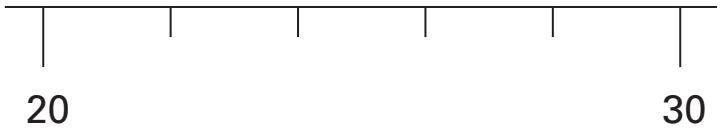
1 The arrow on the number line shows the value **26**



(a) Draw an arrow (↓) on this number line to show the value **26**



1 mark

(b) Now look at this number line.

What value does the arrow show?

. . . . . .

1 mark

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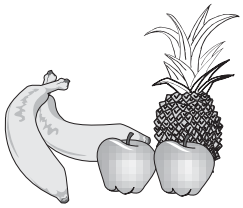
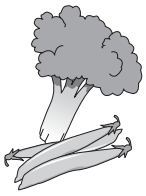
2 John went shopping.

This is how much he spent.

 £2.60	 96p	£1.15	65p

Altogether, how much did John spend?

£ . . . . .

1 mark

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3 (a) Complete the missing times.

The first one is done for you.

10 o'clock in the morning → 10:00

Quarter to 7 in the morning → . . . . . 1 mark

Quarter past 7 in the evening → . . . . . 1 mark

(b) Complete the missing time.

. . . . . → 21:00 1 mark

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4 Ben recorded the number of words in the titles of books.

The tally chart shows his results.

Titles of books	
one word	𝍸
two words	𝍸 ||||
three words	𝍸 𝍸 ||
four words	𝍸 𝍸
five words	𝍸 |
six or more words	𝍸 |||

(a) How many books had titles with **four** words?

..... 1 mark

(b) Altogether, how many books had titles with **fewer than three** words?

..... 1 mark

(c) What was the **most common** number of words in the title?

..... words 1 mark

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5 (a) Steve says there are **1000 centimetres in one metre**.

Is he correct?

☐ Yes ☐ No

Explain your answer.

1 mark

(b) How many **millimetres** are in **one centimetre**?

..... millimetres

1 mark

6 A school raised £1758 for charity.

A newspaper wrote:

> School raises nearly **£1800** for charity

Write the missing number in this sentence.

The newspaper rounded £1758 to the nearest .....

1 mark

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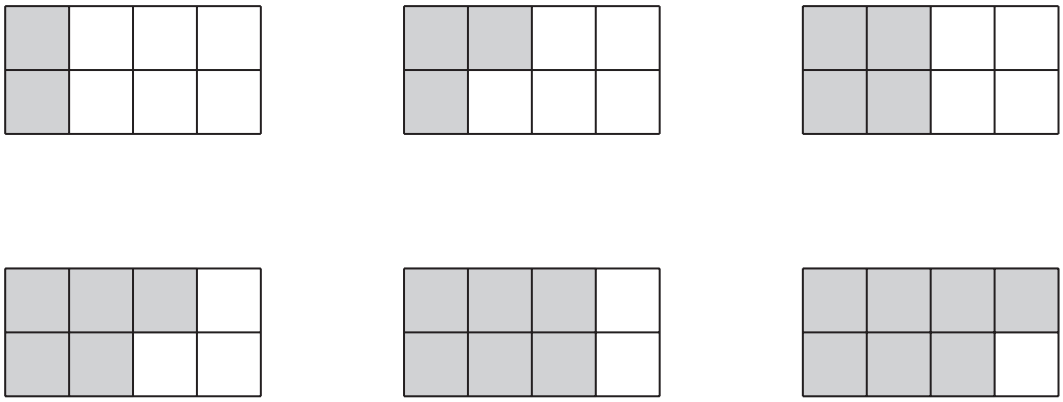
7 (a) Which shape below is shaded $\frac{3}{4}$ grey?

Put a ring round the correct one.



1 mark

(b) Amy says:

> $\frac{1}{2}$ of 20 is bigger than $\frac{1}{4}$ of 40

Is she correct?

☐ Yes ☐ No

Explain how you know.

1 mark

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8 Here is a number line.

The number line can help you work out the missing numbers below.

The first one is done for you.

Start at **1** — Add **3** — Finish at *4*

Start at **1** — Subtract **3** — Finish at ..... 1 mark

Start at **–6** — Add ..... — Finish at **6** 1 mark

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9 (a) Which number below is **four thousand and seven**?

Put a ring round it.

47 407 4007

40007 400007

. . . . .
1 mark

(b) Write in figures the number **three million**.

. . . . . .

. . . . .
1 mark

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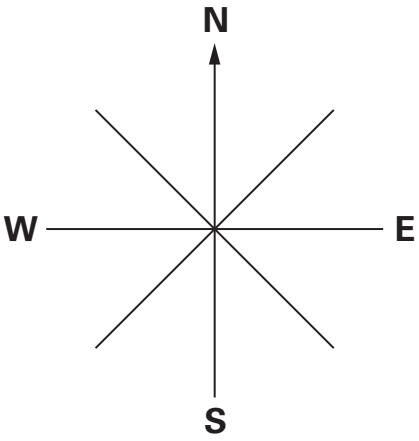
10 (a) Terry is facing **north**.

He turns **clockwise** through **three right angles**.

Which direction is he facing now?



..... 1 mark

(b) Lily is facing **east**.

She turns **clockwise** through **90 degrees**.

Which direction is she facing now?

..... 1 mark

(c) Mina is facing **west**.

She turns **clockwise** to face **north-west**.

Through how many degrees does she turn?

..... degrees 1 mark

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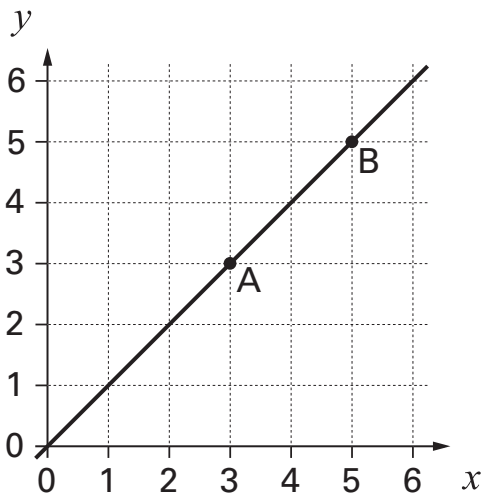
11 Here is a line on a square grid.

Points A and B are on the line.



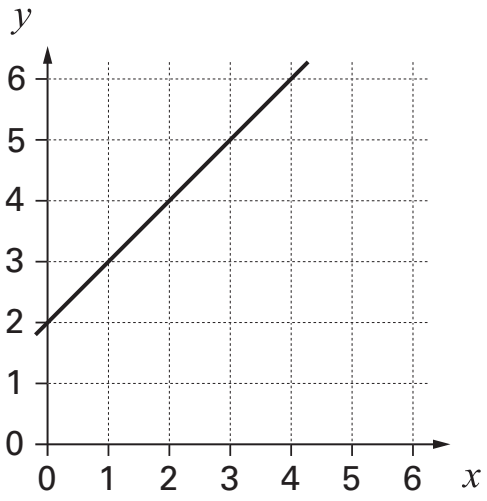
(a) The coordinates of point A are (3, 3)

What are the coordinates of point B?

(. . . . . , ...)

1 mark

(b) Here is a different line on the square grid.



Write the coordinates of any point on this line.

(. . . . . , ...)

1 mark

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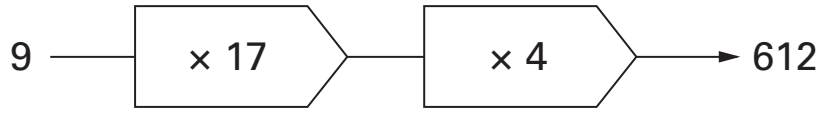
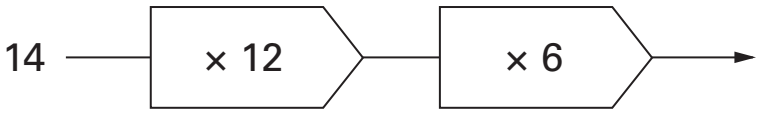
12 Look at this multiplying chain.

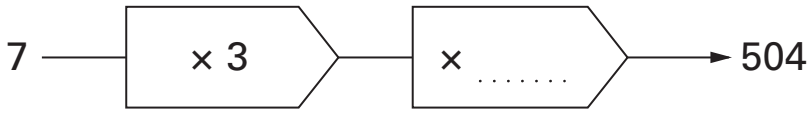


Write the missing numbers in the multiplying chains below.



. . . . . .

1 mark



. . . . . .

1 mark

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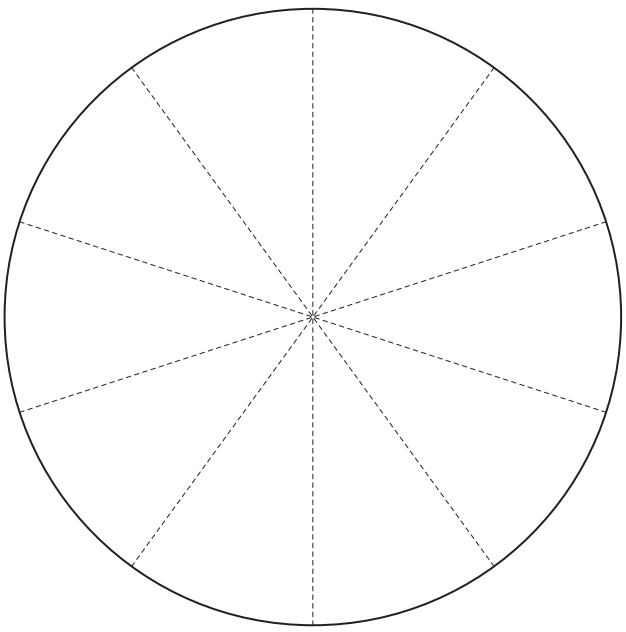
13 The table shows information about which primary school pupils went to.

Name of primary school	Ash	Burgate	Grange	Park
Percentage of pupils who went to that school	10%	40%	25%	25%

Complete the pie chart below to show the information in the table.

Label your pie chart with the **names** of the schools.



. . . . .

. . . . .

2 marks

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14 (a) Sam wrote the calculation:

$$\frac{1}{4} + \frac{1}{4} = \frac{2}{8}$$

Is he correct?

☐ Yes ☐ No

Explain your answer.

. . . . .
1 mark

(b) Think about the fraction $\frac{1}{5}$

How many of them add to make 1?

. . . . . .

. . . . .
1 mark

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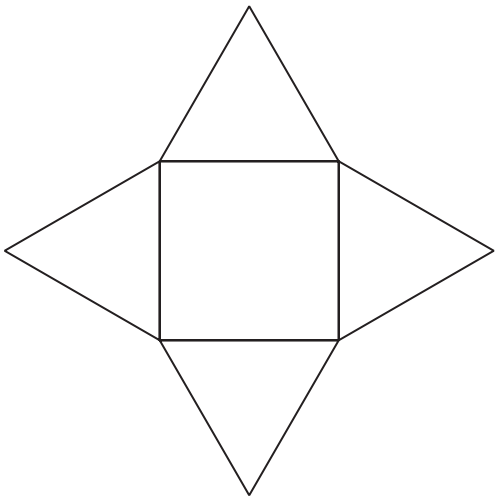
15 Here is a net of a 3-D shape.



When the net is folded, what 3-D shape will it make?

Tick (✓) the correct answer below.

Cube	Prism	Square-based pyramid
Triangular-based pyramid	Cuboid	

1 mark

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16 Amit says:

> When you **add three odd numbers** the answer is **always even**.

Is he correct?

☐ Yes ☐ No

Explain how you know.

1 mark

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17 A teacher asked each pupil in her class:

'How many calculators do you own?'

The frequency table shows the results.

Number of calculators	Frequency
0	5
1	22
2	1

(a) How many pupils are in the class?

..... pupils

1 mark

(b) Altogether, how many calculators do the pupils in the class own?

..... calculators

1 mark

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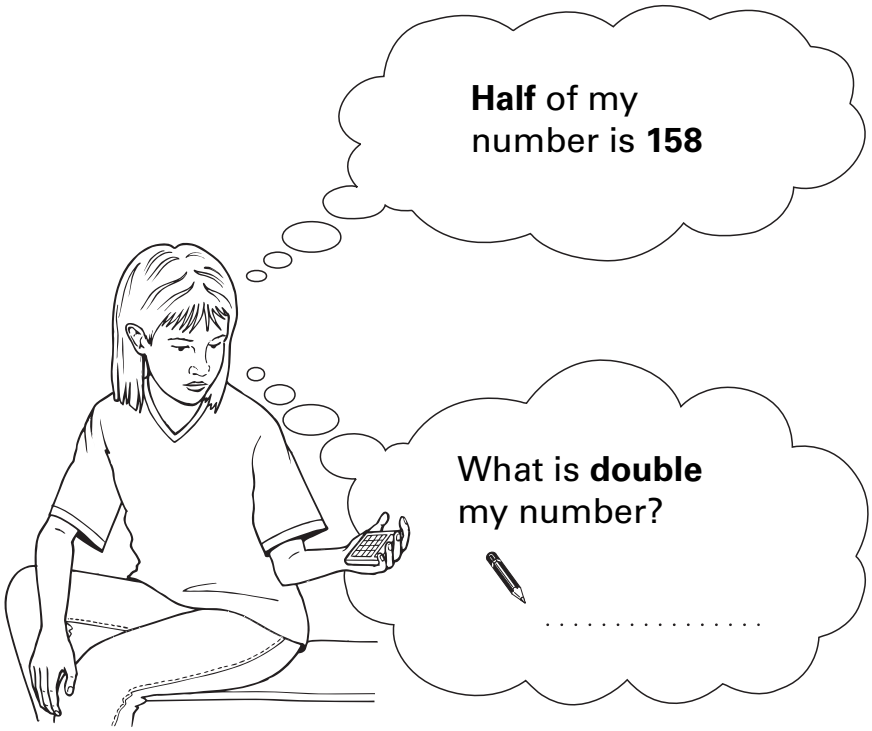
18 Kim is thinking of a number.



. . . . . .

1 mark

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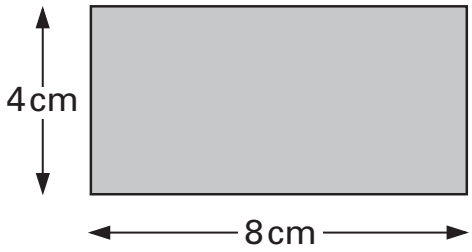
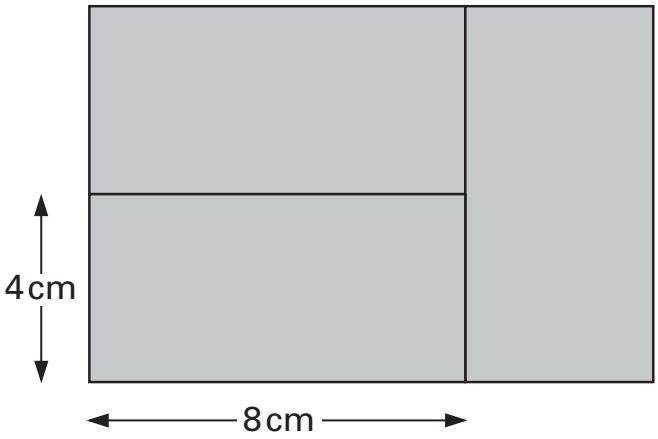
19 A rectangle measures 4 centimetres by 8 centimetres.



Not drawn accurately

Kelly uses three of these rectangles to make a larger rectangle.



Not drawn accurately

Work out the distance around the outside of this larger rectangle.

. . . . . cm

2 marks

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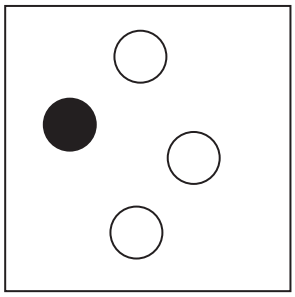
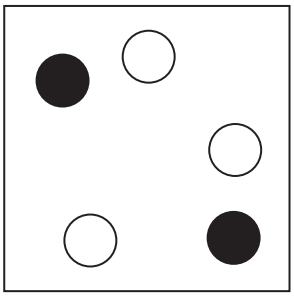
20

Box A



One black and
three white counters

Box B



Two black and
three white counters

(a) I am going to take a counter from one of the boxes without looking.

Which box gives the **higher chance** of taking a **white** counter?

☐ Box A ☐ Box B

Explain your answer.

1 mark

(b) I am going to take a counter from box C without looking.

It is **just as likely** that I will get a white counter as a black counter.

Show what counters might be in box C.

Box C

1 mark

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21 The diagram shows part of a block of flats.

There are **four** flats on each floor.

(a) What are the numbers of the flats on the **10th** floor?

....., ..., ..., ...

1 mark

(b) On what floor is flat number **60**?

....

1 mark

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END OF TEST

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QCA, Years 7 and 8 Team, 83 Piccadilly, London W1J 8QA

QCA/05/1485 (pupil pack)
QCA/05/1483 (teacher pack)