

CANDIDATE
NAME

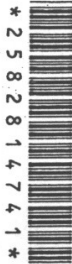
--

CENTRE
NUMBER

--	--	--	--	--	--

CANDIDATE
NUMBER

--	--	--	--	--	--



MATHEMATICS

Paper 2

Pretest 0845/02/1

April/May 2012

45 minutes

Candidates answer on the Question Paper.

Additional Materials:

Pen
Pencil
Ruler

Protractor

Calculator

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces at the top of this page.

Write in dark blue or black pen.

DO NOT WRITE IN ANY BARCODES.

Answer all questions.

The number of marks is given in brackets [] at the end of each question or part question.

You should show all your working in the booklet.

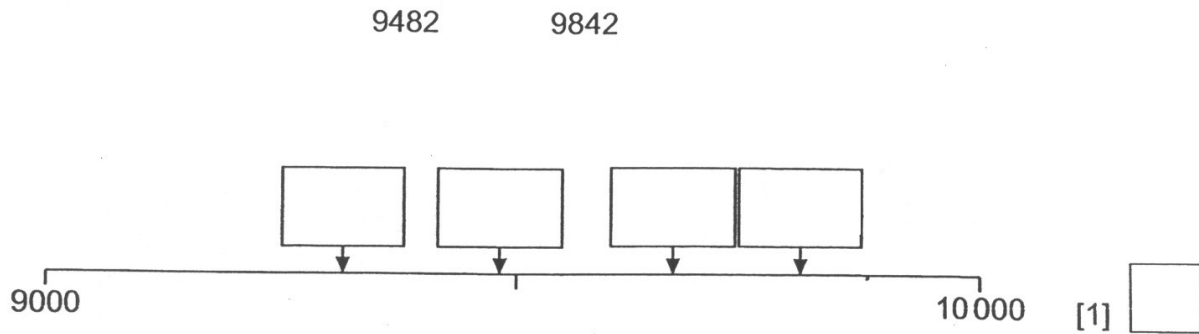
The total number of marks for this paper is 40.

For Examiner's Use	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
Total	

This document consists of 21 printed pages and 3 blank pages.



- 1 Write each number in its correct box to show its position on the number line.



- 2 Put a tick (✓) next to the calculation that is the same as $\frac{1}{4}$ of 12.

12×4

$12 - 4$

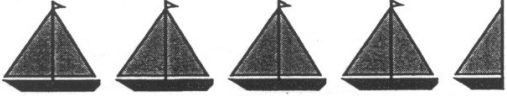
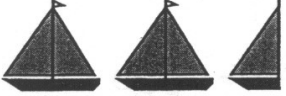
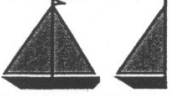
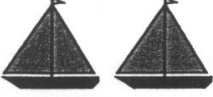

$12 + \frac{1}{4}$



$12 \div 4$

$12 - \frac{1}{4}$

[1]

3 George counts the number of boats sailing into a harbour on 5 days.

Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Key  represents 10 boats
 represents 5 boats

How many boats does George count sailing into the harbour altogether?

..... boats

[1]



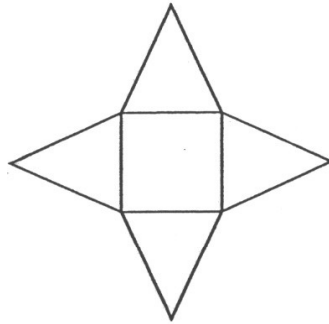
4 Complete the boxes.

438 → To the nearest 10 →

536 → To the nearest 100 →

[1]

5 Here is a net of a 3D shape.



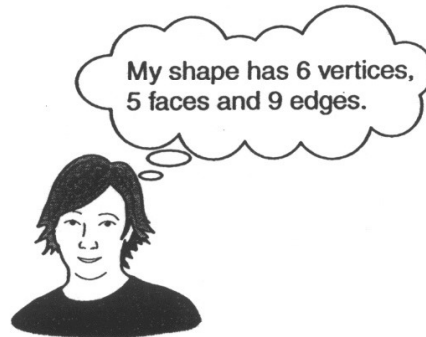
(a) What 3D shape does it make?

.....

[1]



(b) Alex thinks of a 3D shape.



Write down the name of the 3D shape Alex is thinking of.

.....

[1]



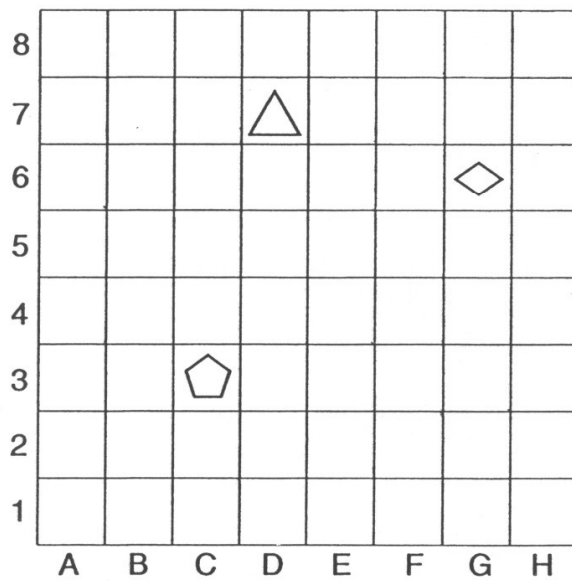
6 Complete these number facts.

$$\frac{\square}{4} + \frac{1}{4} = 1$$

$$\frac{1}{\square} + \frac{1}{2} = 1$$

[1]

7 The diagram shows a grid.



(a) Draw a circle in B4.

[1]

(b) Write down the position of the triangle.

..... [1]

8 Here is a clock face.



(a) What time does the clock face show?

..... [1]

(b) Write 11:25 pm as a 24-hour clock time.

[1]

9 Complete the table.

The first row has been done for you.

In words	In figures
Six hundred and forty	640
Seven thousand, nine hundred and six	
	2079

[1]



10 The first 5 numbers in a sequence are

6, 8, 12, 18, 26, ...

The sequence continues in the same way.

What is the next number in the sequence?

..... [1]

11 Put one tick (✓) in each row to complete this table.

The first row has been done for you.

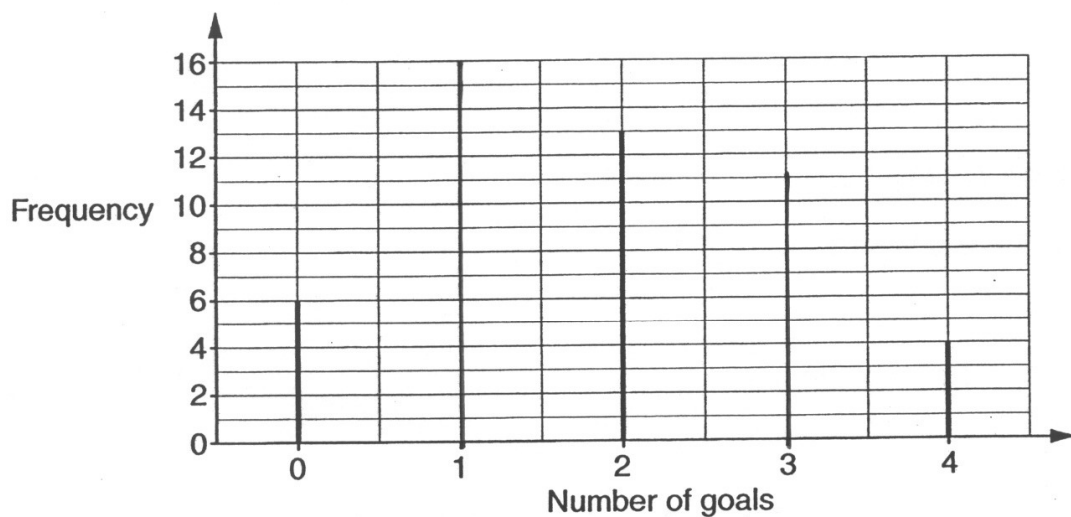
	Less than 50%	Equal to 50%	More than 50%
0.6			✓
$\frac{1}{2}$			
0.05			
$\frac{9}{10}$			

[1]

12 Zoe records the number of goals scored in 50 football matches.

Number of Goals	Frequency
0	6
1	16
2	13
3	11
4	4

(a) Complete the bar-line chart to show Zoe's results.



[1]

(b) Zoe says that the mode for the number of goals scored is 2.

She is wrong.

Explain why.

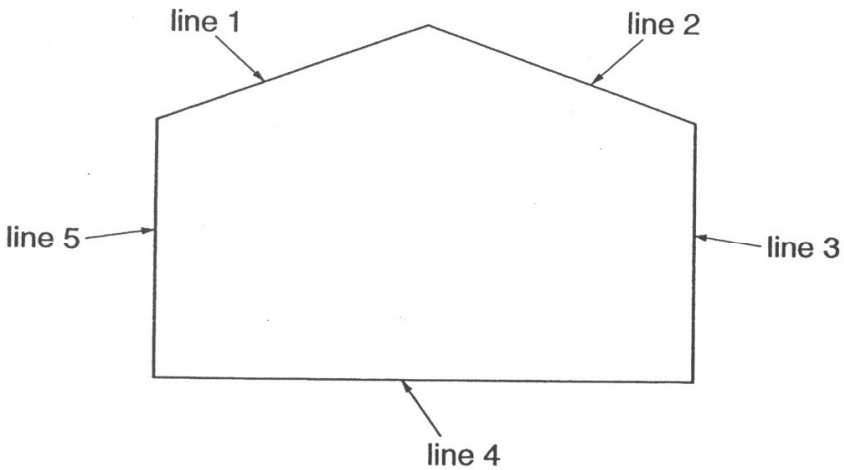
.....

.....

[1]



13 This shape is made from 5 straight lines.



Complete these statements.

The first has been done for you.

Line 1 is equal in length to line 2

Line and line are parallel.

Line 5 is perpendicular to line

[1]

14 Work out 20% of 360

..... [1]

15 Is 90 a multiple of 5?

Yes

No

Give a reason for your answer.

.....
.....

[1]



16 Susan buys a backpack, a torch and a teddy.



(a) How much does she spend altogether?

\$ [1]

(b) How much change does she receive from \$100?

\$ [1]

17 Here are some angles.

90°

60°

155°

236°

Choose the correct angle to complete each sentence.

..... is a right angle.

..... is an acute angle.

..... is an obtuse angle.

[1]



- 18 A piece of ribbon is 8.4 metres long.



The ribbon is cut into 20 equal pieces.

- (a) How long is each piece of ribbon?

..... cm [1]

- (b) The pieces of ribbon are put into packs of 4

Each pack is sold for \$4.60 each.

Jane buys 12 pieces of ribbon.

How much does she spend?

\$ [1]

- 19 Work out.

$$(14.8 + 17.2) \times 1.25$$

.....

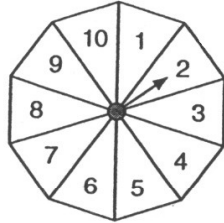
$$120 \div (12 - 4.5)$$

.....

[1]

20 The diagram shows a fair spinner with 10 equal sized sections.

Each section is labelled with a number from 1 to 10



Annette spins the spinner.

(a) Tick the word that describes how likely each event is to happen.

Annette scores a number smaller than 8

- Impossible
- Unlikely
- Even chance
- Likely
- Certain

Annette's score is a multiple of 12 _____

- Impossible
- Unlikely
- Even chance
- Likely
- Certain

[1]

(b) Give an example of an event connected with this spinner that has an even chance of happening.

..... [1]



21 (a) Round 8375 to the nearest thousand.

..... [1]

(b) Round 3.66 to the nearest tenth.

..... [1]

22 Jenny thinks of two prime numbers.

Both numbers are bigger than 10

The sum of her numbers is 28

What are the two numbers that Jenny is thinking of?

..... and [1]

23 Use one of the symbols to complete each number sentence.

< = >

$$\frac{5}{8} \text{ } \frac{3}{8}$$

$$\frac{6}{8} \text{ } \frac{3}{4}$$

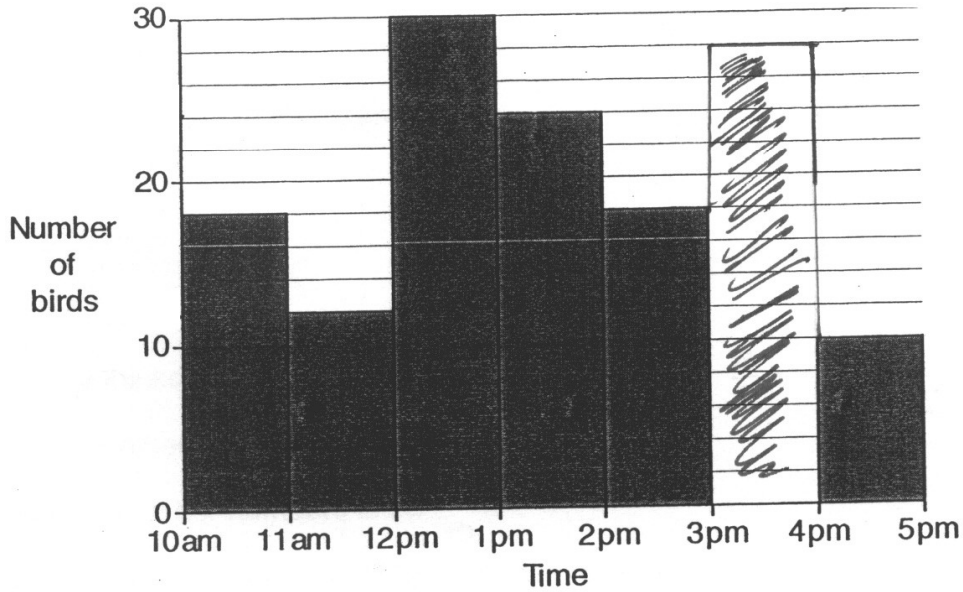
$$\frac{3}{8} \text{ } \frac{1}{2}$$

[1]



24 Samir counted the number of birds visiting her garden each hour between 10 am and 5 pm.

The chart shows some of her data.



(a) Samir says

I counted double the number of birds between 1 pm and 2 pm than I did between 11 am and 12 pm.

Is Samir correct? **Yes / No**

Explain your answer

.....

[1]

(b) Between 3 pm and 4 pm she saw 28 birds.

Complete the chart.

[1]

25 (a) Tick (✓) to show whether each of these calculations is true or false.

	True	False	
$27 \div 5 = 5 \text{ remainder } 2$	<input type="checkbox"/>	<input type="checkbox"/>	
$47 \div 7 = 5 \frac{6}{7}$	<input type="checkbox"/>	<input type="checkbox"/>	
$37 \div 6 = 6 \frac{1}{6}$	<input type="checkbox"/>	<input type="checkbox"/>	[1] <input type="checkbox"/>

(b) Complete this calculation.

$$\boxed{} \div 7 = 4 \frac{2}{7}$$

[1]

26 The price of a coat is \$45

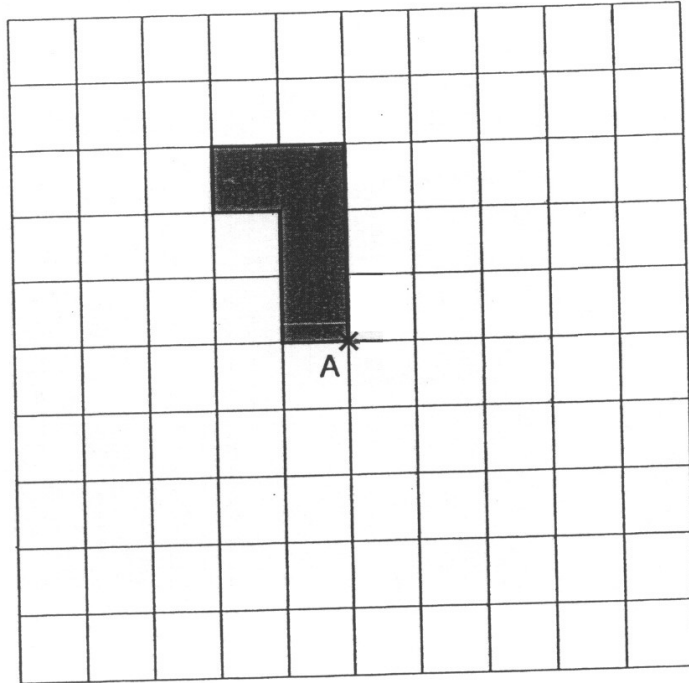
In a sale the price is reduced by 15%.

Work out the price of the coat in the sale.

\$ [1]

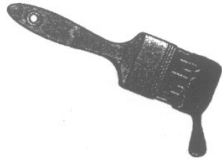


27 Rotate the shape clockwise through an angle of 90° about vertex A.



[1]

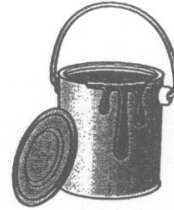
28 The cost of some items in a decorating store is shown.



paintbrush
\$2.40



stepladder
\$18.70



paint
\$13

Freddie has \$100

He buys two paintbrushes and a stepladder.

Work out the most cans of paint he can buy with the money he has left.

Show how you worked out your answer.

..... cans

[2]

29 Fill in the missing digits to make this addition correct.

$$\begin{array}{|c|c|c|} \hline 2 & 6 & \square \\ \hline \end{array} + \begin{array}{|c|c|c|} \hline 5 & \square & 4 \\ \hline \end{array} = \begin{array}{|c|c|c|} \hline \square & 1 & 7 \\ \hline \end{array}$$

[1]

