

MATHEMATICS C
(Graduated Assessment)

1966/2341B

FOUNDATION TERMINAL PAPER – SECTION B

Tuesday

7 JUNE 2005

Afternoon

1 hour

Candidates answer on the question paper.

Additional materials:

Geometrical instruments

Pie chart scale (optional)

Tracing paper (optional)

Scientific calculator

Candidate Name

Centre Number

Candidate
Number

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

TIME 1 hour

INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and candidate number in the boxes above.
- Answer **all** the questions.
- Write your answers, in blue or black ink, on the dotted lines unless the question says otherwise.
- Read each question carefully and make sure you know what you have to do before starting to answer.
- There is a space after most questions. Use it to do your working. In many questions marks are given for a correct method even if the answer is incorrect.

INFORMATION FOR CANDIDATES

- You are expected to use a calculator in Section B of this paper.
- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this Section is 50.
- Section B starts with question 9.
- Use the π button on your calculator or take π to be 3.142 unless the question says otherwise.

FOR EXAMINER

Section B

(ii) Explain how you worked it out.

(b) Here is a different number pattern.

51 41 43 33 35 25 27

Explain how to work out the next two numbers in this pattern.

(c) Here is another number pattern.

picture
1



12
lines

picture
2



18
lines

picture
3



24
lines

picture
4



30
lines

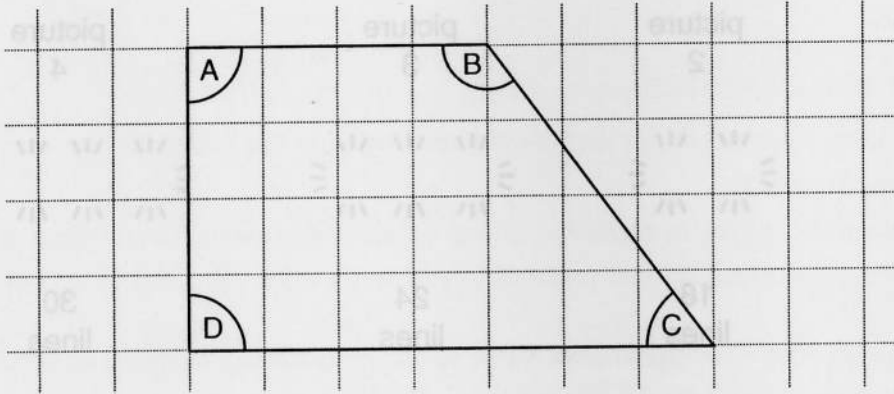
This formula is used to find the number of lines for a picture.

multiply the picture number by 6 then add 6

Use the formula to find the number of lines for picture 10.

(c)

11



(a) Complete.





Angle is acute.


Angle is a right angle.

Angle is obtuse.

(b) By measuring, find the perimeter of this shape.

(b)

Foggy	 
Rainy	     
Sunny	   

	stands 2 days
--	---------------

(a) Six days were Cloudy.

Show this on the pictogram.

(b) Which type of weather was most common?

(b)

(c) How many days were Foggy?

(c)

Five-day World Records		
Female	Deborah Andollo	3117 feet
Male	Yusuf Bhatti	3192 feet

(b) The Library is metres from the Library.

(c) She spent minutes in the Library.

(d) The Post Office is metres from the Library.

(b)

218 seconds is the same as minutes and seconds.

- (b) About how many feet is 121 metres?
Ring the closest answer.

40 300 350 400 480 500

- (c) The next day Tanya set another world record for a single breath dive, this time without f
She descended to a depth of 115 feet, resurfacing after 1 minute 44 seconds.

How much deeper is 121 metres than 115 feet?
Show all your working.
Give the units of your answer.

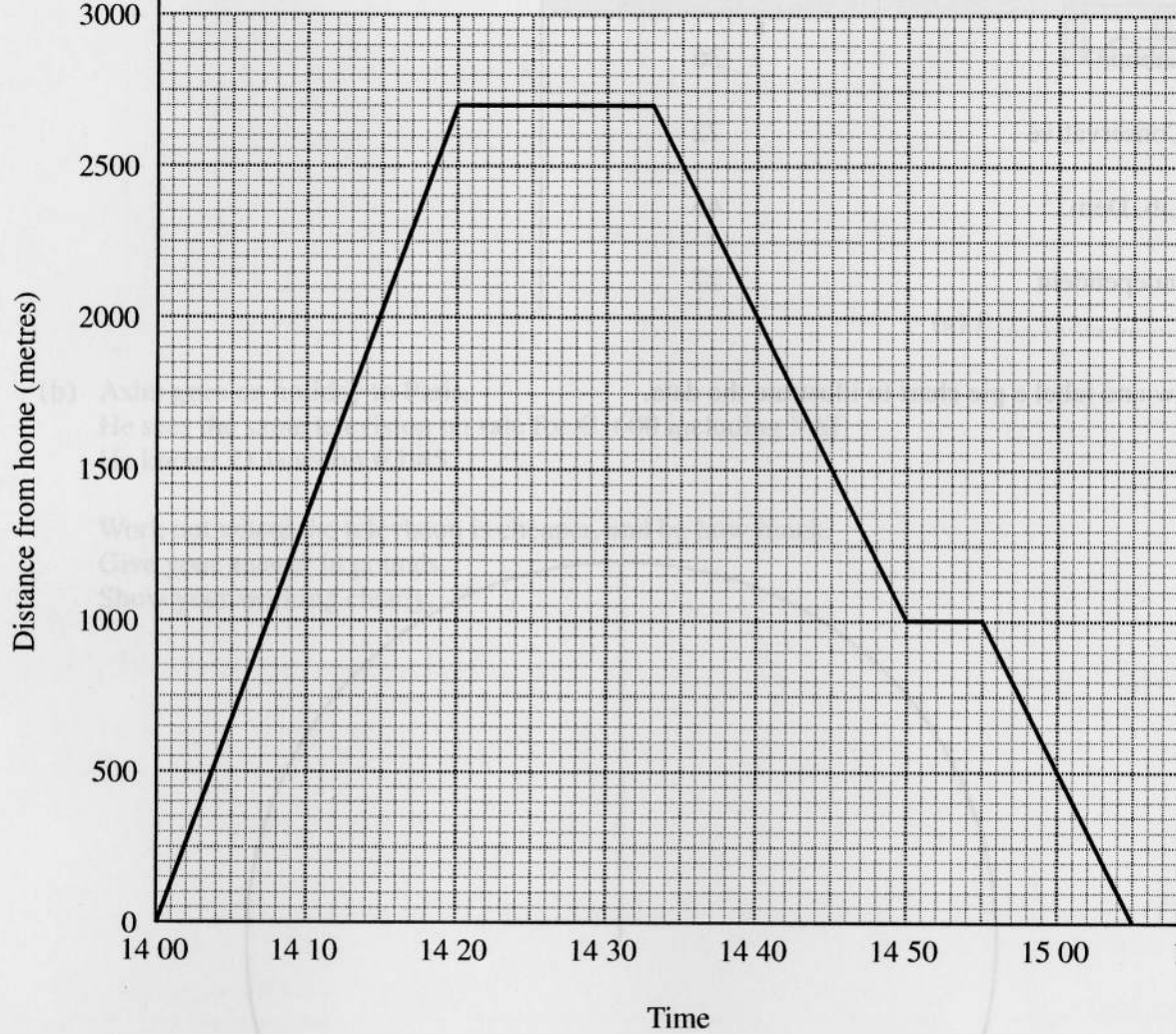
(c)

- (d) This table shows the previous records.

Free-dive World Records		
Female	Deborah Andollo	311.7 feet
Male	Patrick Musimu	393.7 feet

How much deeper was the male record than the female?

(d)

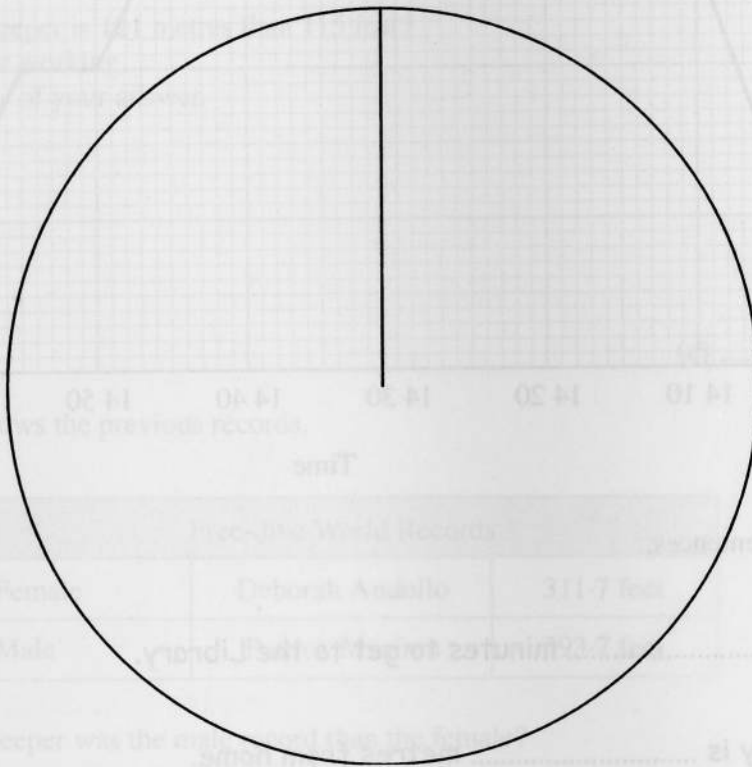


Complete these sentences.

- (a) It took minutes to get to the Library.
- (b) The Library is metres from home.
- (c) She spent minutes in the Library.
- (d) The Post Office is metres from the Library.

Labour	36
Conservative	72
Lib. Dem.	45
Independent	27

Draw and label a pie chart to illustrate the data.



(a) £.....

- (b) Asim goes on holiday to Paris.
He sees the same television on sale for €1600 including VAT.
He knows £1 is worth €1.45.

Work out where the television is cheaper, and by how much.
Give your answer in pounds.
Show your working clearly.

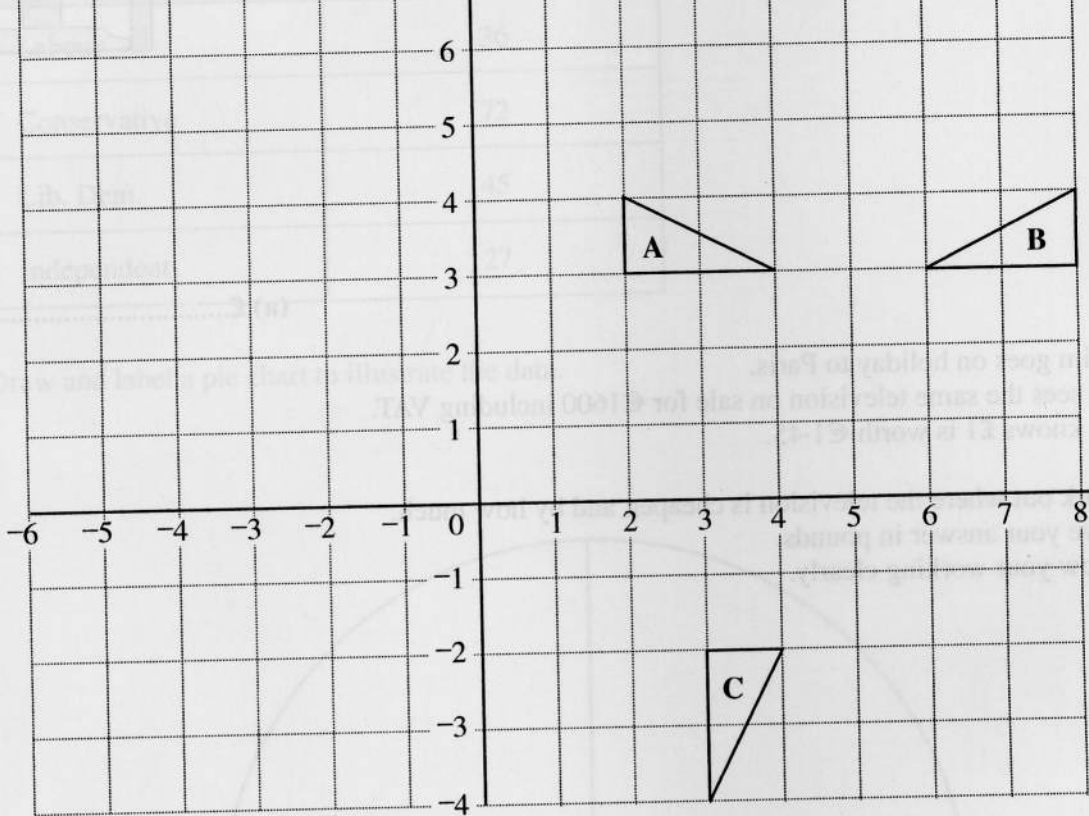
(b) It is cheaper in by £.....

17 Calculate.

$$\frac{124.5 + 92.62}{26.5 - 15.85}$$

Give your answer correct to one decimal place.

.....



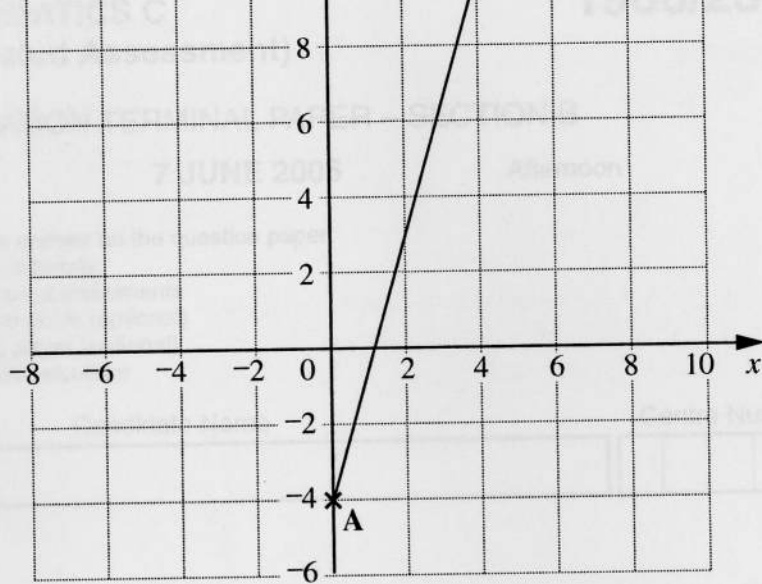
- (a) Complete this description of the **single** transformation which maps triangle **A** onto triangle **B**.

Reflection in

- (b) Describe in full the **single** transformation which maps triangle **A** onto triangle **C**.

.....
.....

- (c) Translate triangle **A** by 6 squares left and 3 squares down.
Label your triangle **D**.



A is the point $(0, -4)$ and B is the point $(4, 10)$.

(a) Write down the coordinates of the midpoint of AB.

(a) (..... ,

(b) ABC is an isosceles triangle.
C is a point on this grid.

Write down the coordinates for two **different** possible positions of C.

(b) (..... ,

(..... ,

FOR EXAMINER

Section B