

Write your name here

Surname

Other names

Pearson Edexcel
International
Advanced Level

Centre Number

--	--	--	--	--

Candidate Number

--	--	--	--

Core Mathematics C1

Advanced Subsidiary



Monday 13 January 2014 – Morning
Time: 1 hour 30 minutes

Paper Reference

6663A/01**You must have:**

Mathematical Formulae and Statistical Tables (Pink)

Total Marks

--

Calculators may NOT be used in this examination.

Instructions

- Use **black** ink or ball-point pen.
- If pencil is used for diagrams/sketches/graphs it must be dark (HB or B). Coloured pencils and highlighter pens must not be used.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions and ensure that your answers to parts of questions are clearly labelled.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- You should show sufficient working to make your methods clear. Answers without working may not gain full credit.

Information

- The total mark for this paper is 75.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

P43134A

©2014 Pearson Education Ltd.

5/5/5/


PEARSON

4.

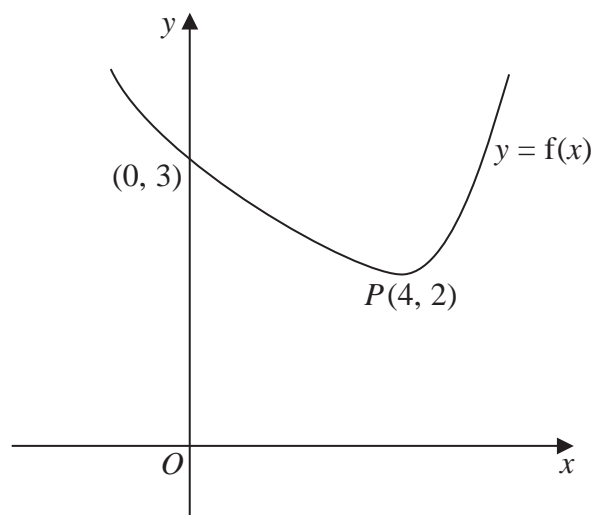
**Figure 1**

Figure 1 shows a sketch of a curve with equation $y = f(x)$.

The curve crosses the y -axis at $(0, 3)$ and has a minimum at $P(4, 2)$.

On separate diagrams, sketch the curve with equation

(a) $y = f(x + 4)$, (2)

(b) $y = 2f(x)$. (2)

On each diagram, show clearly the coordinates of the minimum point and any point of intersection with the y -axis.



Leave
blank

Question 4 continued

Q4

(Total 4 marks)



6.

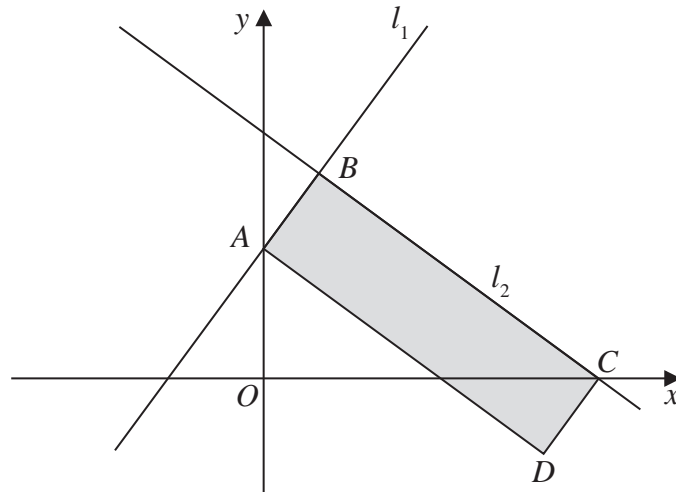


Figure 2

The straight line l_1 has equation $2y = 3x + 7$

The line l_1 crosses the y -axis at the point A as shown in Figure 2.

(a) (i) State the gradient of l_1

(ii) Write down the coordinates of the point A .

(2)

Another straight line l_2 intersects l_1 at the point $B(1, 5)$ and crosses the x -axis at the point C , as shown in Figure 2.

Given that $\angle ABC = 90^\circ$,

(b) find an equation of l_2 in the form $ax + by + c = 0$, where a , b and c are integers.

(4)

The rectangle $ABCD$, shown shaded in Figure 2, has vertices at the points A , B , C and D .

(c) Find the exact area of rectangle $ABCD$.

(5)



Leave
blank

Question 9 continued

Q9

--	--

(Total 12 marks)



