Centre No.					Pape	r Refer	ence			Surname	Initial(s)
Candidate No.			1	1	7	1	/	3	H	Signature	

Paper Reference(s)

1171/3H

Edexcel GCSE

Business Studies & Economics

(Nuffield-BP)

Paper 3H – Problem Solving

Higher Tier

Tuesday 9 June 2009 – Afternoon

Time: 1 hour 15 minutes

Materials required for examination	Items included with question papers
Nil	Nil

Instructions to Candidates

In the boxes above, write your centre number, candidate number, your surname, initial(s) and signature. The paper reference is shown at the top of this page. Check that you have the correct question paper. Answer ALL the questions in Section A and ALL parts of the question in Section B.

Your answers to Section A and Section B must be written in the spaces provided in this question paper. Show all the steps in any calculations and state the units.

Do not use pencil. Use blue or black ink.

Information for Candidates

The marks for individual questions and the parts of questions are shown in round brackets: e.g. (2).

There are 7 questions in this question paper. The total mark for this paper is 100.

There are 20 pages in this question paper. Any blank pages are indicated.

Credit will be given for the use of recent examples, where relevant and appropriate.

You may use a calculator.

Quality of Written Communication will be assessed throughout this question paper.

Advice to Candidates

You are advised to spend the first fifteen minutes reading the question paper.

You are reminded of the importance of clear English and careful presentation in your answers.

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Turn over

Examiner's use only

Team Leader's use only

Total

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Evidence A:

Airbus introduces its new 'superjumbo'

In October 2007 Airbus (a European aeroplane manufacturer) officially launched its new plane, the A380, the so-called 'super jumbo'. Airbus hopes that the bigger size of the A380 will give it a competitive advantage over its main rival, Boeing's 747.

The main customers for Airbus and Boeing aeroplanes are large airlines, such as British Airways.

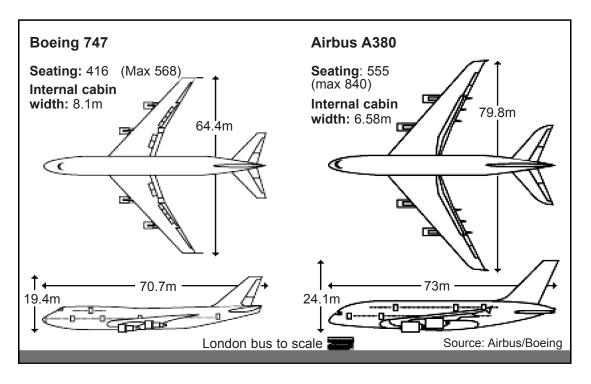


A main objective of both manufacturers is to produce aircraft that will appeal to the main airlines. They do this by researching and developing new products and technologies.

Source: adapted from http://www.airbus.com/store/photolibrary/EVENTS/CEREMONY/att00008734/media_object_image_lowres_A380_certification3_mr.jpg

Evidence B:

Comparing the Boeing 747 with the Airbus A380



Source: adapted from http://larsholst.info/blog/2005/01/20/airbus-a380-vs-boeing-747/



Comparison summary

	Boeing 747	Airbus A380
Purchase price	\$250 million	\$300 million
Seating (maximum)	568	840
Cruise speed	902 km per hour	907 km per hour
Range (how far the plane can fly with maximum fuel)	14,800 km	14,205 km

A380 confirmed quietest long range aircraft in the skies

• A report by the European Aviation Safety Agency in November 2007 confirmed that the Airbus A380 was one of the quietest aircraft in the skies. This is important for people who live close to airports.

Fuel Efficiency

• Airbus claims that the A380 uses 20% less fuel per passenger than any other long range aircraft.

Source: adapted from http://www.airbus.com/en/presscentre/pressrelease/pressreleases_items/07_11_21_quietest long range aircraft.html – http://portal.aircraft-info.net/article8.html

Evidence C:

Airbus will need \$78 billion of orders to break even on A380

AIRBUS needs to win orders worth approximately \$78 billion before its A380 superjumbo project breaks even.

Airbus needs to sell 420 aircraft to reach its break-even point. Last year it had forecast that it would need to sell 270 aircraft to break even

Airbus said that increased cost and compensation payments for delays in delivering orders had caused this change in the break-even point, after which it becomes profitable.

The company has so far received orders for 159 of the double-decker aircraft. It must now sell a further 261 before it makes a profit on the project.

Source: http://business.timesonline (20 October 2007) by David Robertson



Evidence D:

Airbus wins huge Emirates order

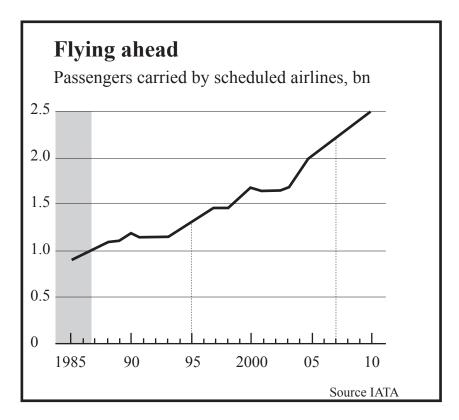
Airbus and Boeing are in competition with each other. Both companies produce different types of aircraft to meet different markets.

The Dubai-based airline Emirates has chosen to buy aircraft from Airbus. The sale of aircraft to Emirates will be worth \$35 billion to Airbus. Rising crude oil prices help increase demand for more fuel efficient aeroplanes like the A380.

Source: adapted from International Herald Tribune, – 11 November 2007

Evidence E:

Passenger numbers flying high. The chart shows the total number of passengers carried by airlines each year.



Source: adapted from http://www.economist.com/business/displaystory.cfm?story_id=9944806



Evidence F:

As air travel continues to grow in popularity, so has the amount of opposition to this particular type of transport. A number of pressure groups are highlighting the environmental damage which air travel can cause. Greenpeace is one such pressure group.

According to Greenpeace:

- flying is ten times more damaging to the environment than train travel
- emissions from air travel will be four times greater in 2050 than in 1990.

Greenpeace is campaigning against a proposed expansion of Heathrow airport which involves building a new runway. Greenpeace claims that the expansion of Heathrow will increase the number of flights over London by 900 each day to over 2,000. There are currently over 1,200 flights a day over London.

Source: adapted from http://www.greenpeace.org.uk/heathrow/no-3rd-runway

Evidence G:





In November 2007 members of Greenpeace carried out a protest at the Eurostar train station at St Pancras in London. The group urged the Prime Minister to abandon the proposal to build a third runway at Heathrow Airport. Greenpeace would like to see a rise in the use of train travel.

 $Source: adapted \ from \ http://www.greenpeace.org.uk/blog/climate/yes-to-rail-no-to-a-3rd-runway-20071114$

Section A

a Erridanaa A and D)	
ee Evidence A and B)	
Using an example, explain what is meant by the term 'competition'.	
	•••••
	•••••
	(4)
Use the Evidence to describe two ways in which the Airbus A380 has a 'compet	itive
advantage' over the Boeing 747.	ILIVC
	(6)
(Total 10 mai	

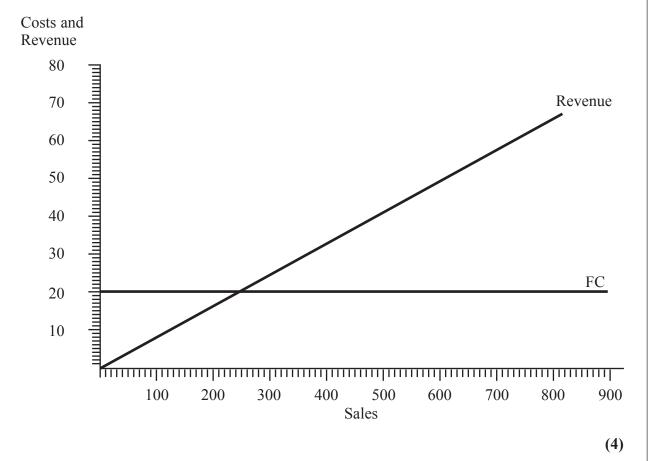
3. (See Evidence B)

(a) Using an example, explain the meaning of the term 'break-even point'.

 	 (4)

Airbus needs to sell 420 of the A380 to break-even.

(b) On the diagram below, draw and label a total cost line which gives a break-even point of 420. Clearly label the break-even point.



	signing and building the A380 was a risk for Airbus. It has been suggested that the npany may struggle to sell enough of the A380 to break-even.	
(c)	Assess two reasons why a business such as Airbus might struggle to achieve the level of sales needed to break-even.	
	(8)	
	(Total 16 marks)	

(a)	Explain the difference between internal and external sources of finance. Give one example of each.
	(6)
(b)	The costs involved in designing and building new aeroplanes are very high. Explain
(b)	
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	(10)

(Se	e Evidence B and F)
(a)	Define the term 'negative externalities'.
(b)	Analyse two possible negative externalities that might arise from the busin activities of a company like Airbus.

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(8)	Q6
(Total 10 marks)	
TOTAL FOR SECTION A: 70 MARKS	

Leave blank

Section B

You must answer ALL parts of the question in this section.

7.

(Us	e all the Evidence.)
(a)	One method by which Airbus might compete with Boeing is to reduce the price of its aircraft. Use your knowledge of break-even analysis to analyse the effects of this strategy on its break-even level of output.



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	ethical responsibility.
c)	Using your suggestions in part (b) above, explain the most appropriate method which a business such as Airbus would show its ethical responsibility.

		(8)
(d)	To what extent is product development $-$ i.e. developing new types of aeroplanebest way for Airbus to succeed in the markets in which it operates?	- the
		•••••
		•••••



	Leave blank
(10	
(Total 30 marks)	,
TOTAL FOR SECTION B: 30 MARKS	
TOTAL FOR PAPER: 100 MARKS	3
END	
END	