



**Cambridge International Examinations**  
Cambridge International General Certificate of Secondary Education

CANDIDATE  
NAME

CENTRE  
NUMBER

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CANDIDATE  
NUMBER

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**GEOGRAPHY**

**0460/22**

Paper 2

**October/November 2017**

**1 hour 30 minutes**

Candidates answer on the Question Paper.

Additional Materials:     Ruler  
                                  Protractor  
                                  Plain paper  
                                  Calculator

1:25 000 Survey Map Extract is enclosed with this Question Paper.

**READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name in the spaces provided.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams or graphs.

Do not use staples, paper clips, glue or correction fluid.

**DO NOT WRITE IN ANY BARCODES.**

Write your answer to each question in the space provided.

If additional space is required, you should use the lined pages at the end of the booklet. The question number(s) must be clearly shown.

Answer **all** questions.

The Insert contains Photograph A for Question 3.

The Survey Map Extract and the Insert are **not** required by the Examiner.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

At the end of the examination, fasten all your work securely together.

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

Definitions

MEDCs – More Economically Developed Countries

LEDCs – Less Economically Developed Countries

NICs – Newly Industrialised Countries

The syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

This document consists of **18** printed pages, **2** blank pages and **1** Insert.

1 Study the map extract for Bordalen, Norway. The scale is 1:25 000.

(a) Fig. 1 shows some of the features in the north west of the map extract. Study Fig. 1 and the map extract, and answer the questions below.

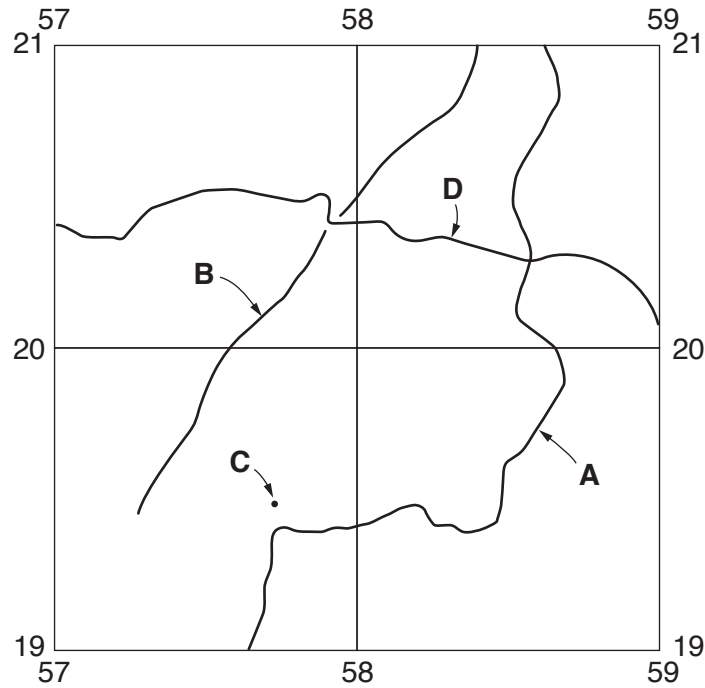


Fig. 1

Using the map extract, identify the following features shown on Fig. 1:

(i) feature **A**;

.....[1]

(ii) the name of river **B**;

.....[1]

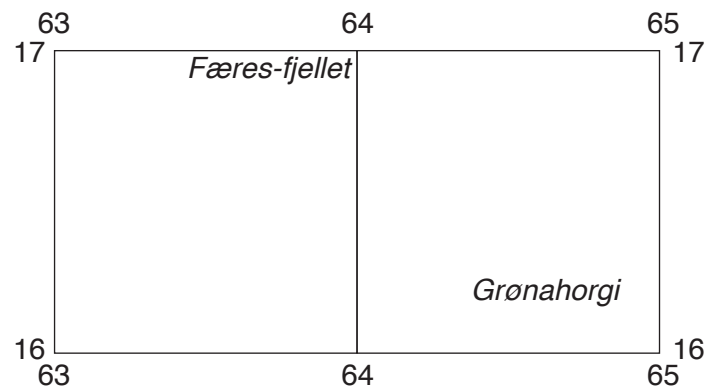
(iii) the height above sea level of the spot height at **C**;

..... metres [1]

(iv) the height above sea level of the contour at **D**.

..... metres [1]

- (b) Fig. 2 shows the location of two grid squares in the south east of the map extract. These are square 6316 at Færes-fjellet and square 6416 at Grønahorgi. Study the two areas and answer the questions below.



**Fig. 2**

The table below compares the features of the two areas. Complete the table by putting ticks in the correct **five** boxes. Use only **one** tick for each row.

	Square 6316 at Færes-fjellet	Square 6416 at Grønahorgi	Both these areas	Neither of these areas
lakes				
forest				
marsh				
glaciers				
land over 1100 m above sea level				

[5]

(c) Fig. 3 is a cross section along northing 20 from 590200 to 620200.

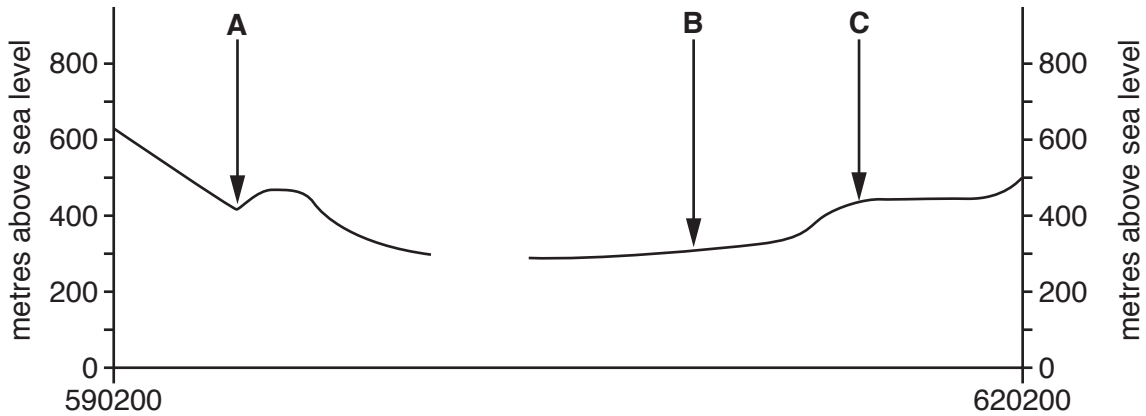


Fig. 3

(i) Name the river at **A**.

..... [1]

(ii) Identify the feature at **B**.

..... [1]

(iii) Identify the type of land use at **C**.

..... [1]

(iv) The cross section shown on Fig. 3 is incomplete. Using information from the map extract, draw a line on Fig. 3 to complete the cross section. [1]

(d) A person walks uphill from the bridge over the main river south of Rjodo (608173) to the trigonometric point at Litraknappen (623167).

(i) In which compass direction does the person travel?

..... [1]

(ii) What distance does the person travel in a straight line?

..... [1]

(iii) How many metres does the person climb? Circle **one** correct answer below.

568 m                      668 m                      768 m                      868 m                      [1]



2 Fig. 4 gives information about population change and population migration in four urban areas in the USA between 2010 and 2013. Study Fig. 4 and answer the following questions.

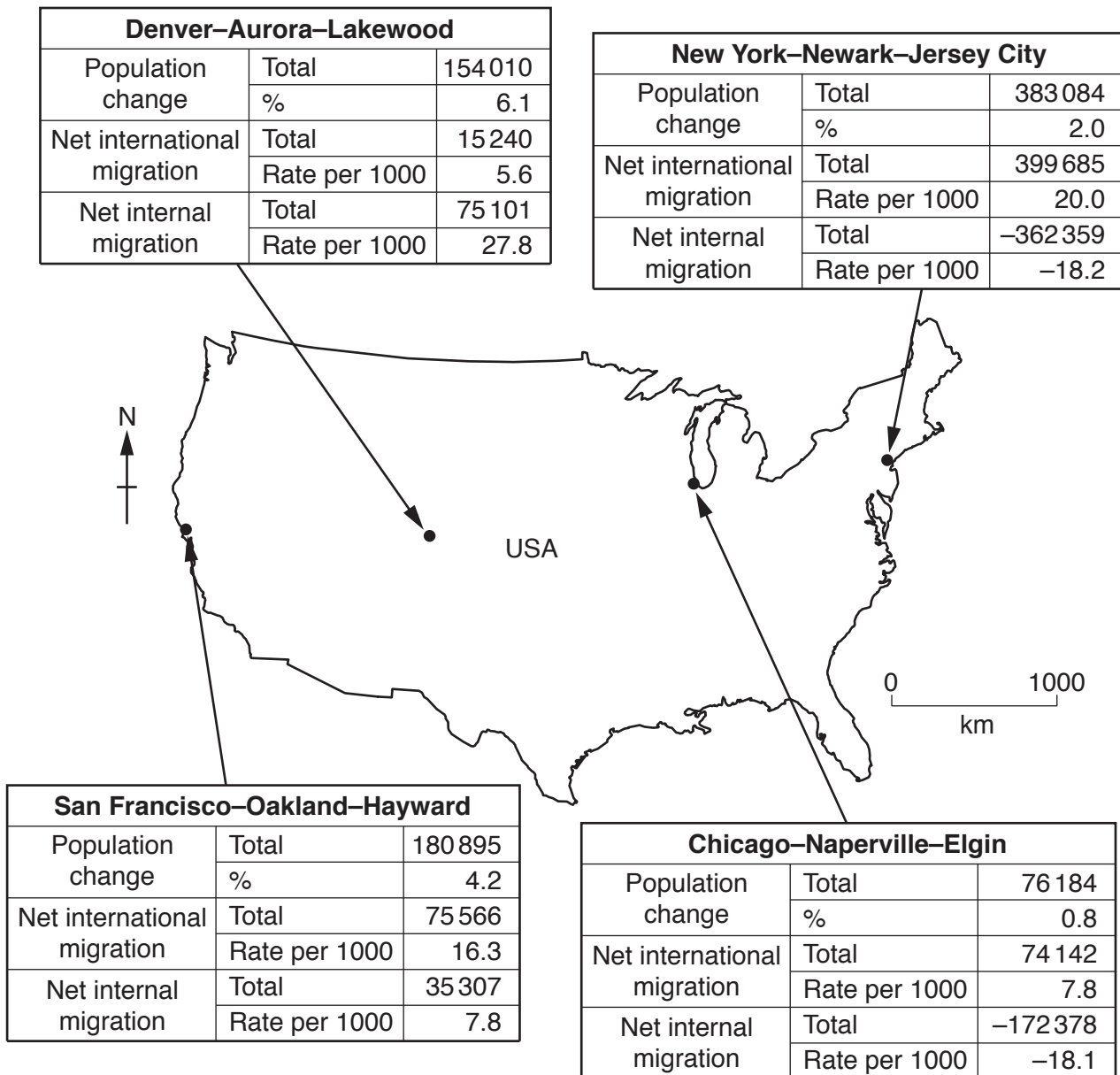


Fig. 4

(a) (i) Which **one** of the four urban areas had the greatest **percentage** change in its population? Tick **one** correct answer below.

Urban area	Tick (✓)
Chicago–Naperville–Elgin	
Denver–Aurora–Lakewood	
New York–Newark–Jersey City	
San Francisco–Oakland–Hayward	

[1]

- (ii) Which **one** of the four urban areas had the greatest change in its **total** population? Tick **one** correct answer below.

Urban area	Tick (✓)
Chicago–Naperville–Elgin	
Denver–Aurora–Lakewood	
New York–Newark–Jersey City	
San Francisco–Oakland–Hayward	

[1]

- (iii) Which **one** of the four urban areas had the greatest gain in population because of migration to and from other countries? Tick **one** correct answer below.

Urban area	Tick (✓)
Chicago–Naperville–Elgin	
Denver–Aurora–Lakewood	
New York–Newark–Jersey City	
San Francisco–Oakland–Hayward	

[1]

- (iv) Which **one** of the four urban areas had the greatest gain in population because of migration to and from other parts of the USA? Tick **one** correct answer below.

Urban area	Tick (✓)
Chicago–Naperville–Elgin	
Denver–Aurora–Lakewood	
New York–Newark–Jersey City	
San Francisco–Oakland–Hayward	

[1]

- (b) Compare the net internal migration of the two urban areas in the east with that of the two urban areas in the west.

.....

.....

.....

.....[2]

(c) Look at the figures for Chicago-Naperville-Elgin.

(i) The area has lost population because of migration. What type of migration has caused this?

.....[1]

(ii) Give **one** cause of the overall population increase.

.....[1]

[Total: 8 marks]





4 Fig. 5 shows the climate of a place in Africa.

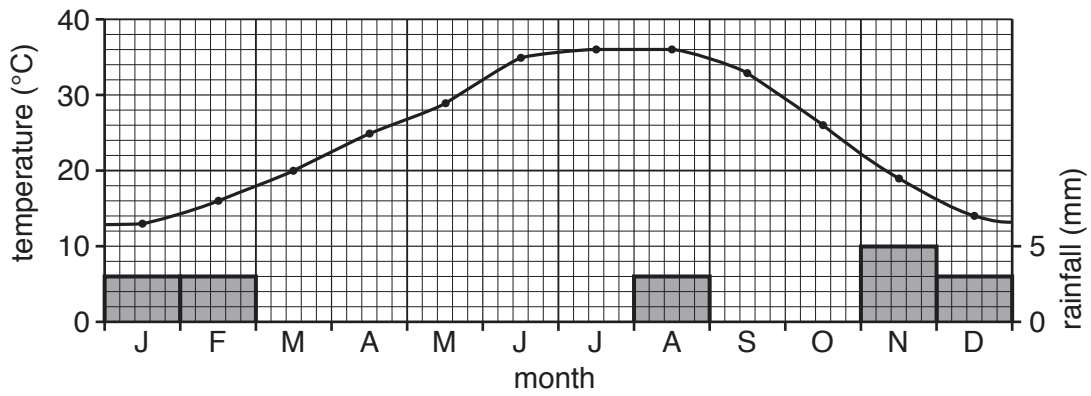


Fig. 5

(a) For the climate shown in Fig. 5 state the:

(i) January temperature;

..... °C [1]

(ii) annual temperature range.

..... °C [1]

(b) What is the annual rainfall at the place shown in Fig. 5? Circle **one** correct answer below.

12 mm                      17 mm                      34 mm                      60 mm                      [1]

(c) Fig. 6 shows the location of three places in Africa, X, Y and Z.

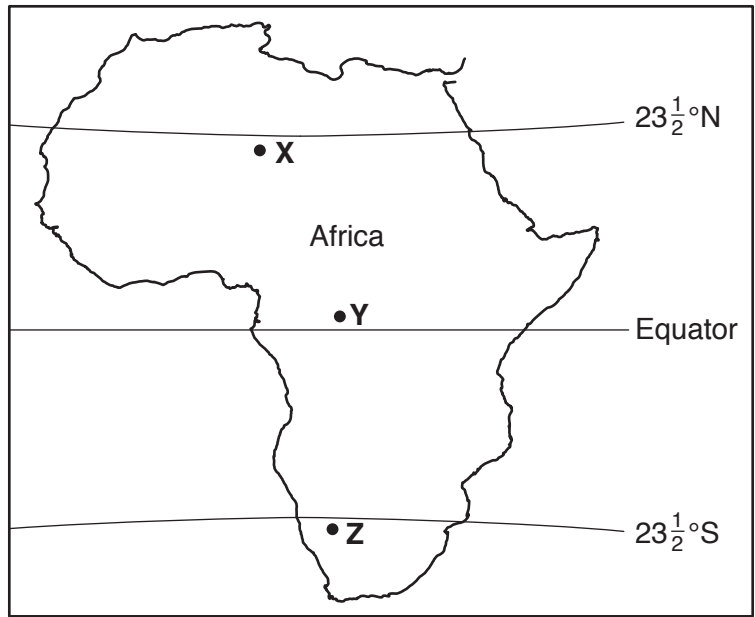


Fig. 6

Which location, X, Y or Z, has the climate shown in Fig. 5?

..... [1]

(d) Give **two** reasons why summer (July) is hotter than winter (January) at the place shown in Fig. 5.

1 .....

.....

2 .....

.....[2]

(e) Suggest **two** reasons for the very low rainfall at the place shown in Fig. 5.

1 .....

.....

2 .....

.....[2]

[Total: 8 marks]

- 5 Fig. 7 shows the rivers and drainage basins of Kazakhstan. Kazakhstan is completely surrounded by other countries.

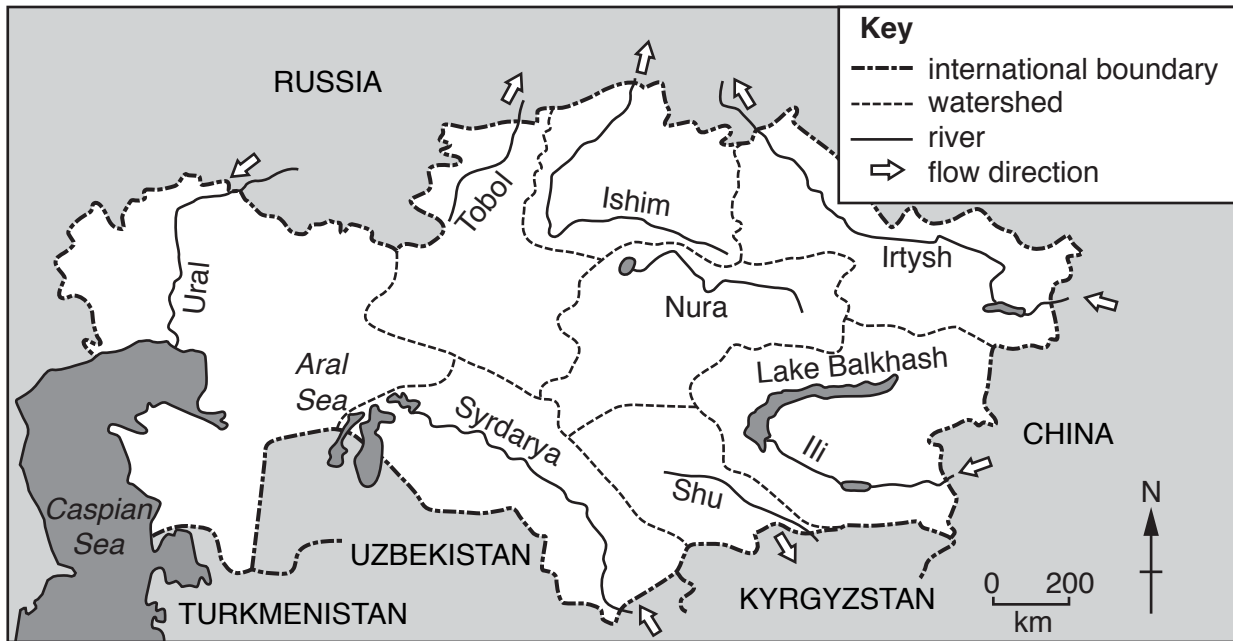


Fig. 7

- (a) (i) What is meant by the following terms:

drainage basin;

.....  
 .....

watershed?

.....  
 ..... [2]

- (ii) Identify **two** rivers shown on Fig. 7 which have their sources outside Kazakhstan and their mouths within Kazakhstan.

1 .....

2 ..... [2]

- (iii) Identify the river shown on Fig. 7 which is entirely within Kazakhstan.

..... [1]



6 Fig. 9 shows annual average solar radiation in South Africa.

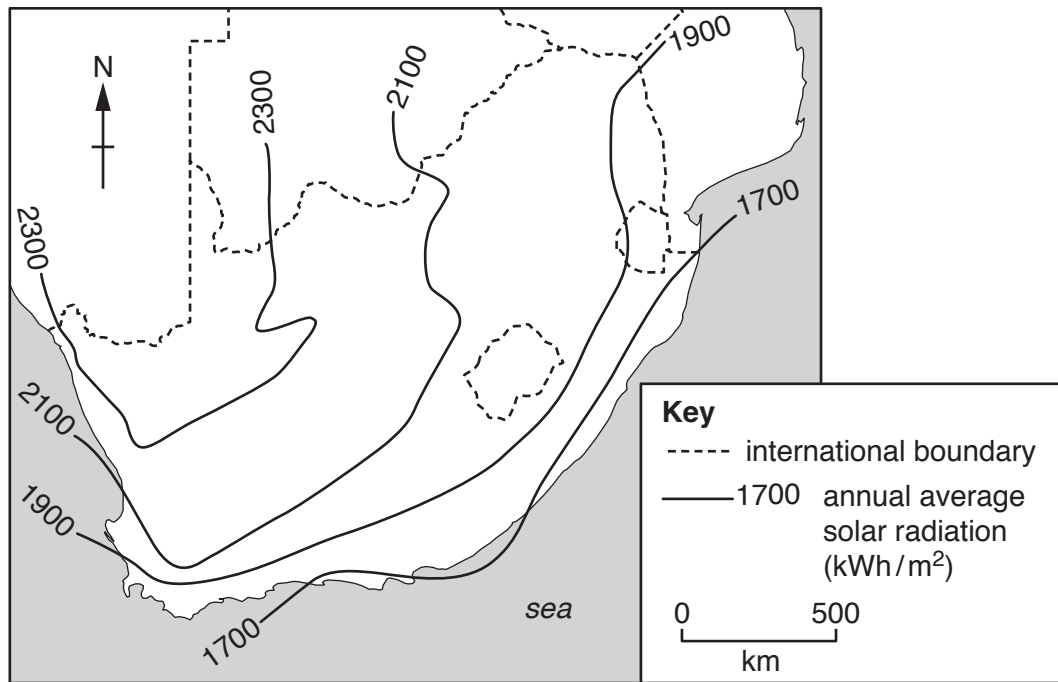


Fig. 9

(a) Using Fig. 9, describe the distribution of solar radiation in South Africa.

.....

.....

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.....

.....

.....

.....

.....

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.....

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.....[3]

(b) Fig. 10 shows the distribution of solar radiation in Germany.

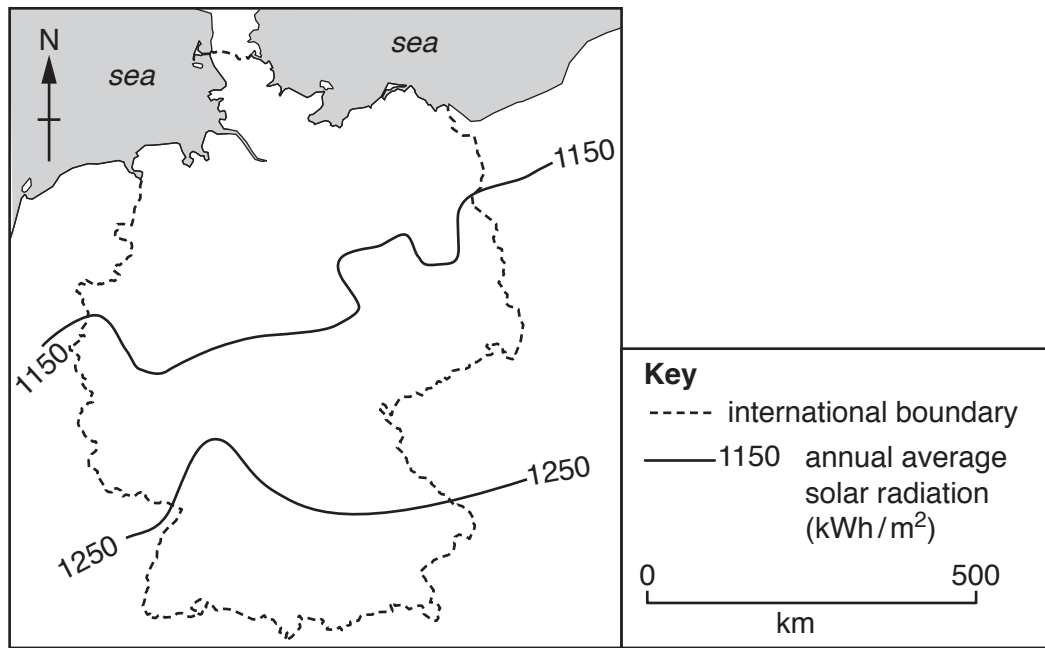


Fig. 10

Using Figs. 9 and 10, describe the difference in the amounts of solar radiation received in South Africa and Germany.

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.....

.....

.....[2]







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