Cambridge O Level

CANDIDATE NAME	

CENTRE NUMBER						CANDIDATE NUMBER				

GEOGRAPHY **2230/02**

Paper 2 Skills **October/November 2019**

(FOR CENTRES IN BRUNEI)

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Protractor
Ruler
1:50 000 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.

Answer **all** questions.

The Insert contains Fig. 1.2 for Question 1, Fig. 4.2 for Question 4, and Fig. 5.1 for Question 5.
The Survey Map Extract and Insert are **not** required by the Examiner.
Sketch maps and diagrams should be drawn whenever they serve to illustrate the 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.

Cambridge Assessment
International Education

[Turn over

1 Study the map extract (1:50 000) of part of Port Antonio, Jamaica.

(a) (i) Name the settlement in grid square 0069.

.... [1]

(ii) What is located at grid reference 088707?

.... [1]

(iii) If you canoe upstream from the bridge at 070650 to the confluence, where two rivers meet, at 071627:

A In which general compass direction would you travel?

.... [1]

B How far would you travel? Tick (✓) the correct answer.

less than 1 km ☐

1–2 km ☐

more than 2 km ☐

[1]

(b) (i) Name **two** different services shown in grid square 0069.

1 ....

2 ....

[2]

(ii) Use the key and the map extract to **complete Table 1.1** below. For each settlement add the correct description. One has been completed for you. Choose from the following descriptions:
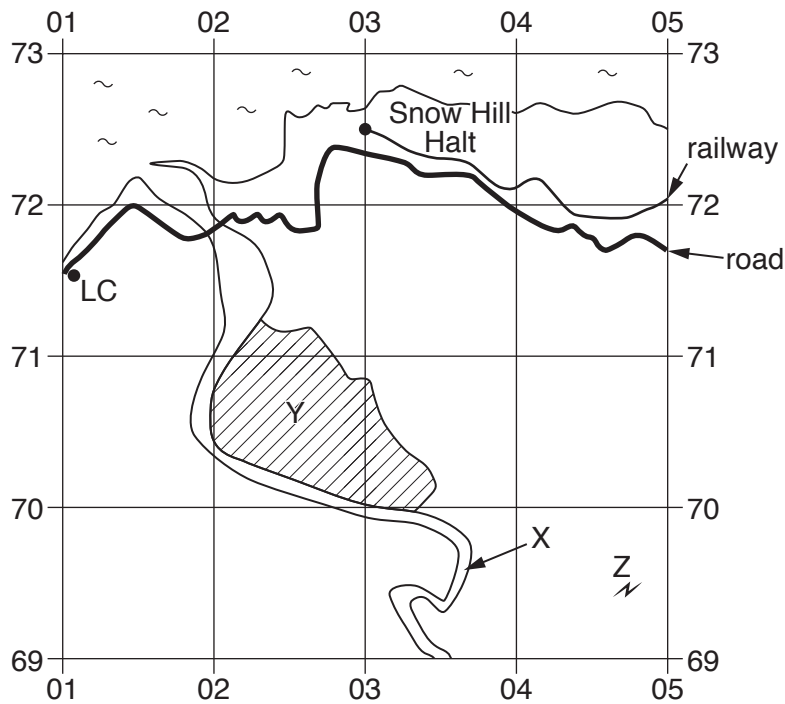
large town
minor town
village [1]

Table 1.1

settlement name	type of settlement
St. Margaret's Bay	
Spring Bank grid square 0568 (south west of Port Antonio)	
Port Antonio	large town

(c) Study Fig. 1.1, which shows an area of the map extract.

Fig. 1.1

   (i) Name river X.

   .... [1]

  (ii) **On Fig. 1.1**, add an arrow along the river to show the direction it is flowing.   [1]

 (iii) What is the land use in area Y?

   .... [1]

  (iv) Name the feature Z.

   .... [1]

   (v) **On Fig. 1.1**, complete the route of the railway line from Snow Hill Halt 030724 to the level crossing (LC) at 010715.   [1]

  (vi) State the total area covered by the grid squares in Fig. 1.1. Give your answer in square kilometres.

   .... [1]

(d) Describe the **natural** features of the coastline from Downers Bluff (grid square 0272) to Ship Head (grid square 0572).

....

....

....

....

....

.... [3]

(e) Study Fig. 1.2 (Insert), which shows five satellite photographs. **Complete Table 1.2** below to identify which photograph corresponds to each grid square location on the map extract. One has been completed for you.

Table 1.2

map location (grid square)	photograph
0869	
0367	
0762	
0171	B
0069	

[4]

[Total: 20]

TURN OVER FOR QUESTION 2

2 (a) Study Fig. 2.1, a five-day weather forecast for Brunei in May.

Five-day weather forecast for Brunei, 1–5 May

Mon 1 May	Tue 2 May	Wed 3 May	Thu 4 May	Fri 5 May
31°C 25°C	30°C 24°C	30°C 25°C	30°C 25°C	29°C 24°C
6	5	3	3	4

Fig. 2.1

(i) Which day had the strongest wind?

.... [1]

(ii) From which direction was the wind blowing on Tue 2 May?

.... [1]

(iii) Complete Table 2.1 below to state the temperatures during this five-day period.

Table 2.1

minimum temperature	
maximum temperature	
temperature range	

[3]

(b) Fig. 2.2 shows the actual daily total rainfall for the same five days in May at Brunei International Airport.

Brunei International Airport, daily total rainfall, 1–5 May
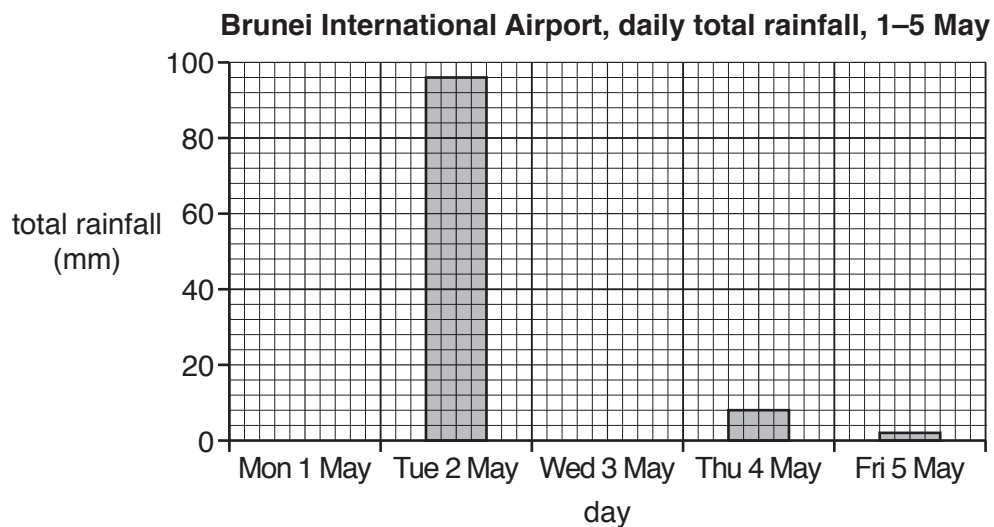
Fig. 2.2

Describe the pattern of rainfall during the five-day period.

....

....

....

....

....

.... [3]

(c) Compare Fig. 2.1 and Fig. 2.2. How accurate do you think the five-day weather forecast was for Brunei? Use data from Fig. 2.1 and Fig. 2.2 to support your view.

....

....

....

.... [2]
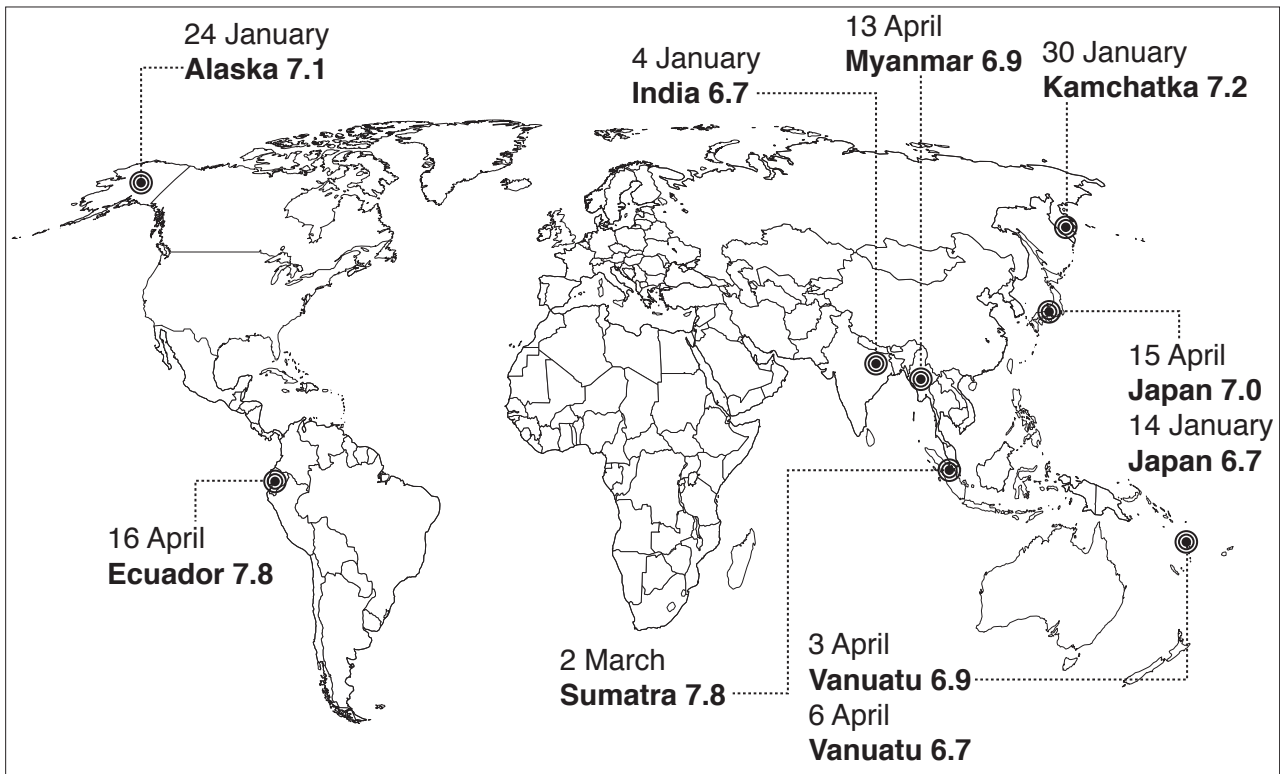
[Total: 10]

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3 **(a)** Study Fig. 3.1, which shows the date, location and strength of the top ten earthquakes (by magnitude) in 2016.

The 10 biggest earthquakes by magnitude in 2016

24 January
Alaska 7.1

4 January
India 6.7

13 April
Myanmar 6.9

30 January
Kamchatka 7.2

15 April
Japan 7.0
14 January
Japan 6.7

16 April
Ecuador 7.8

2 March
Sumatra 7.8

3 April
Vanuatu 6.9
6 April
Vanuatu 6.7

Key
7.8 magnitude (Mw)

Fig. 3.1

(i) What was the magnitude of the 2 March earthquake in Sumatra?

.... [1]

(ii) Name the **two** countries which had two major earthquakes in 2016.

1 ....

2 ....
[1]

(iii) Which month had the most earthquakes in 2016?

.... [1]

(b) Study Table 3.1, which shows details about the major earthquakes in April 2017.

Table 3.1

April 2017 earthquakes

date	country	magnitude (Mw)	damage	deaths	injuries
2 April	Panama	5.3	Some objects fell in supermarkets.		
3 April	South Africa	5.2	Plaster fell from walls and some houses were slightly damaged.		
3 April	Botswana	6.5	36 students were injured in a stampede caused by the earthquake.		36
4 April	The Philippines	5.1	The earthquake damaged houses in Batangas City.		
5 April	Iran	6.1	40% of buildings were destroyed in four villages.	2	34
5 April	Greece	4.8	Older buildings suffered minor damage.		
8 April	The Philippines	5.9	Houses and buildings were badly damaged and landslides occurred.		6
10 April	El Salvador	4.8	One person died and three others were injured when a falling rock hit a car on a highway.	1	3
11 April	The Philippines	5.8	Around 500 homes and two mosques were damaged. Cracks appeared on the national highway.		3
15 April	Chile	6.2	None.		
18 April	Fiji	6.0	None.		
24 April	Chile	6.9	Santiago International Airport suffered slight damage.		
28 April	The Philippines	6.9	Several buildings were damaged and at least one house collapsed, injuring five people.		5

(i) How many earthquakes above magnitude 5Mw occurred in the Philippines in April 2017?

.... [1]

(ii) State **two** different causes of deaths and injuries described in Table 3.1.

1 ....

2 ....

[2]

(iii) Compare the strength of each earthquake in April 2017 with the number of people injured. Which of the following statements (A, B or C) best describes this relationship? Circle the correct letter.

A   Positive relationship: as the strength of the earthquake increases so does the number of injuries.

B   There is no clear relationship.

C   Negative (inverse) relationship: as the strength of the earthquake increases the number of injuries decreases.

[1]

(iv) Give evidence from Table 3.1 to support your answer to **(b)(iii)**.

....

.... [1]

(c) Study Fig. 3.2, a newspaper article about the earthquake on Friday 28 April 2017 in the Philippines.

Friday 28 April 2017

Earthquake off the coast of the island of Mindanao

THE PHILIPPINE ISLANDS

N

LUZON

Manila

SOUTH CHINA SEA

MINDORO

SAMAR

MASBATE

PANAY

LEYTE

PALAWAN

CEBU

BOHOL

NEGROS

SULU SEA

MINDANAO

General Santos

MALAYSIA

0   500
km

The epicentre was located 68 km south of the city of General Santos.
The Philippines lies on the Pacific Ring of Fire.
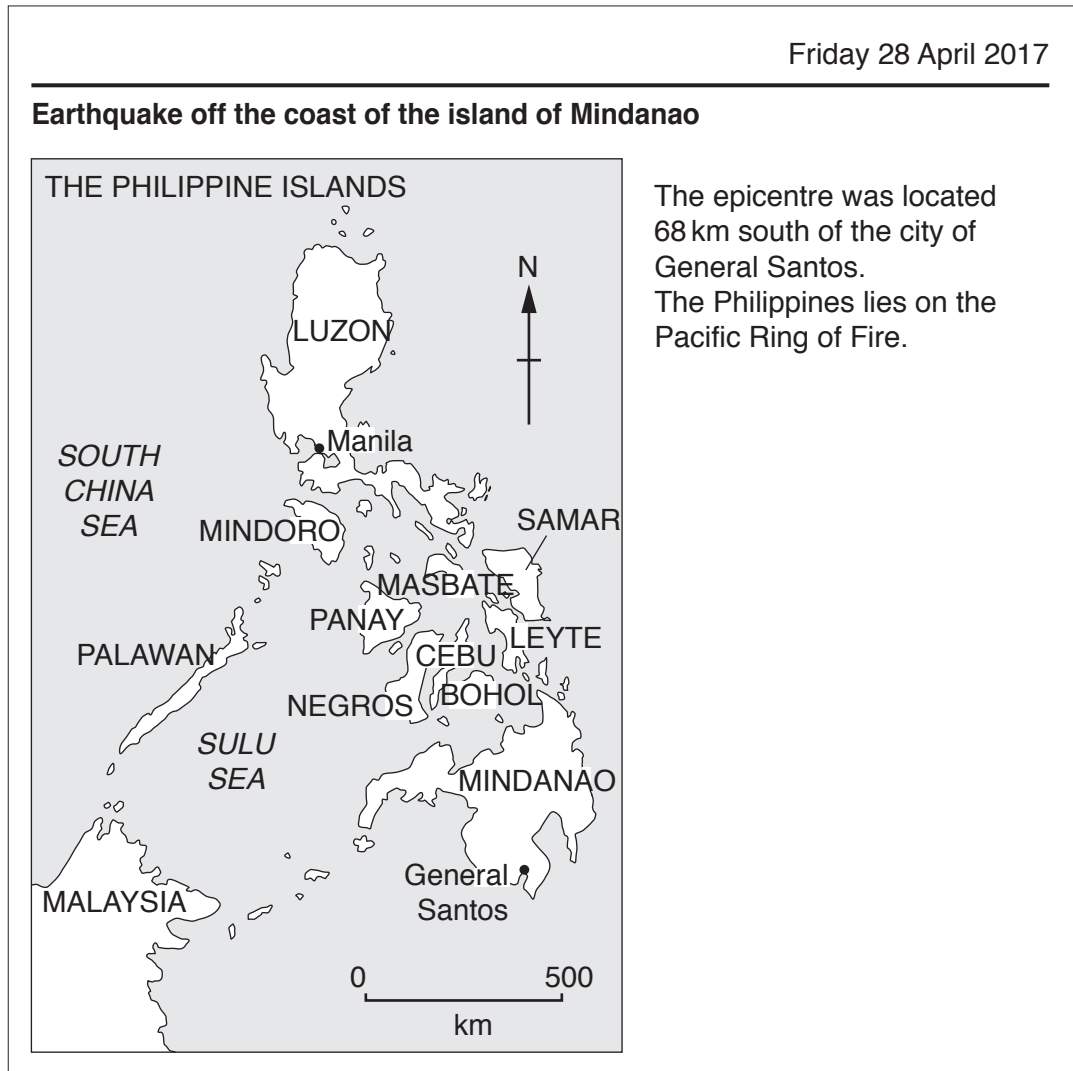
Fig. 3.2

(i) Mark with a small **x** the location of the epicentre of the earthquake **on the map in Fig. 3.2**. [1]

(ii) It states in Fig. 3.2 that, 'The Philippines lies on the Pacific Ring of Fire.' Explain what is meant by the term *Pacific Ring of Fire*.

....

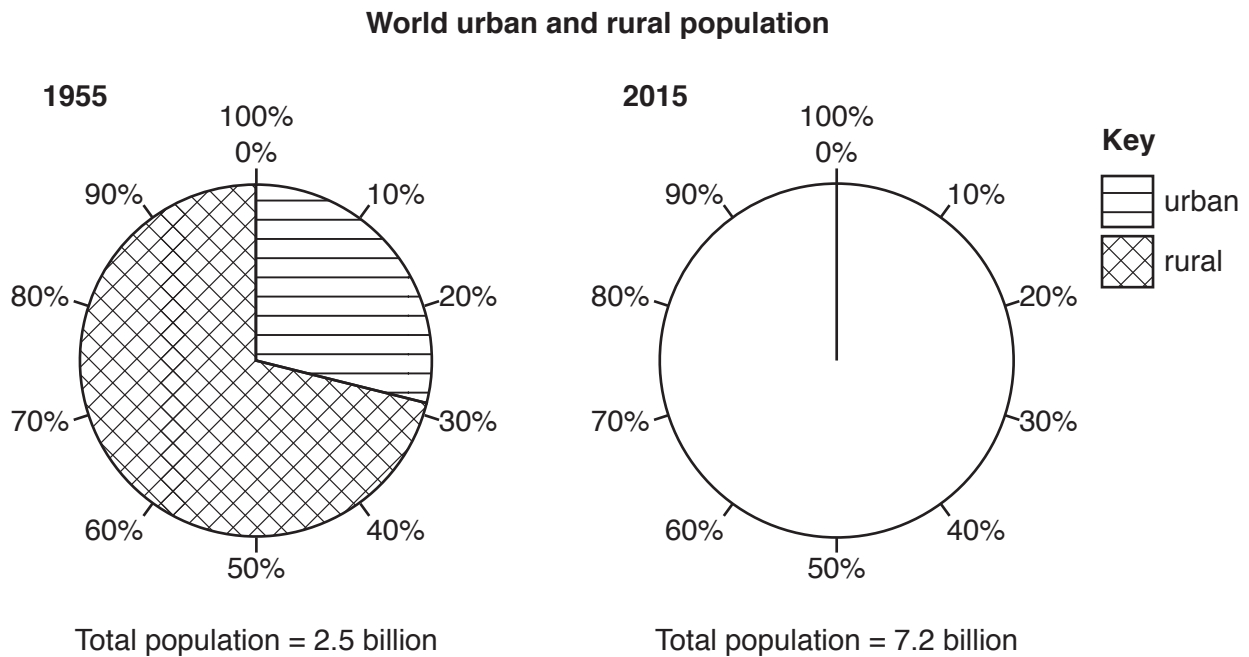... [1]

[Total: 10]

4   (a) In 1955 urban dwellers made up 29% of the world's population. By 2015 urban dwellers had increased to 53% of the world's population.

Use this information to **complete the pie chart for 2015 in Fig. 4.1**.

World urban and rural population

1955

Total population = 2.5 billion

2015

Total population = 7.2 billion

Key

urban

rural

[2]

Fig. 4.1

(b) Study the infographic, Fig. 4.2 (Insert), which shows information about the world's urban population.

   (i) What does the term *urban population* mean?

....

.... [1]

   (ii) Which continent has the most countries that are 0–24% urban?

.... [1]

   (iii) Which country in Southeast Asia is shown to have 50% urban population?

.... [1]

   (iv) The black circles show some cities with populations over 10 million in Asia. What name do geographers use for cities with more than 10 million people?

.... [1]

   (v) Which city on Fig. 4.2 has the greatest urban population?

.... [1]

(vi) Describe how the circles have been drawn to show the number of urban population in millions.

....

.... [1]

(vii) Describe a different way that you could show the data for the cities in Fig. 4.2.

....

....

....

.... [2]

[Total: 10]

5 (a) Study Fig. 5.1 (Insert), a photograph which shows an oil refinery.

(i) Describe the site and situation of the oil refinery shown in Fig. 5.1.

Site ....

....

Situation ....

....
[2]

(ii) Identify the main features of the oil refinery.

....

....

....

....

....

.... [3]

(b) Study Fig. 5.2, which shows changes in worldwide oil refining, 2004–2013.

Worldwide oil refining, 2004–2013

Key

———— capacity

– – – – number of oil refineries
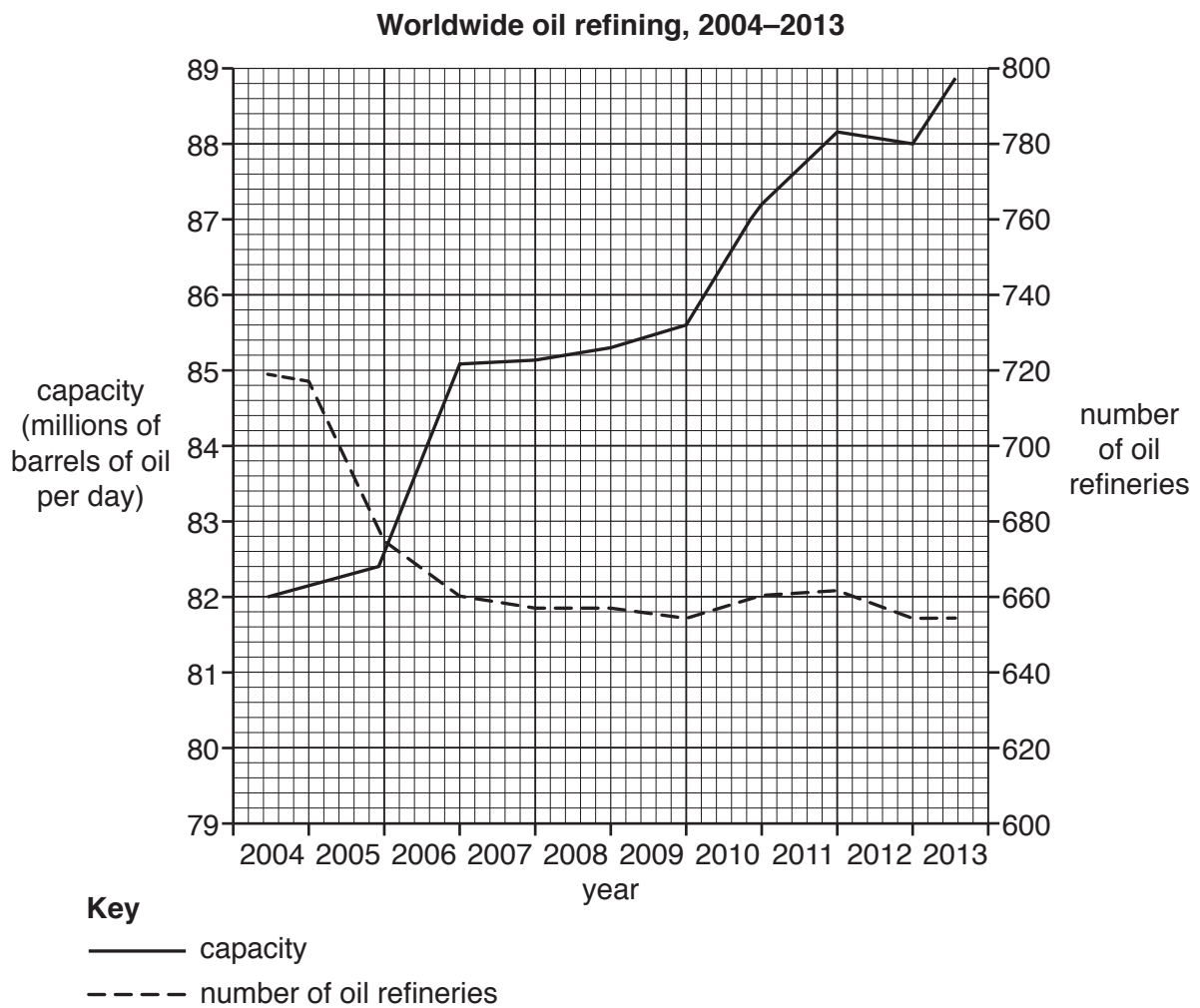
Fig. 5.2

(i) Use Fig. 5.2 to describe how the capacity changes from 2004 to 2013. Use data from Fig. 5.2 to support your answer.

....

....

....

....

....

.... [3]

(ii) How does the number of oil refineries in 2013 compare to the number of oil refineries in 2004?

.... [1]

(iii) What can you conclude about the output of each oil refinery in 2013 compared to 2004?

.... [1]

[Total: 10]

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