2.20 Choropleth Maps: 1-hour Pack

EDEXCEL 1ST0 · Calculator allowed · about 60 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 A population pyramid for Village C shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	550	220
20 to 39	510	300
40 to 59	340	480
60 and over	520	500

(a) Find the total number of males and the total number of females.

(b) Write the ratio males : females in its simplest form.

(Total for Question 1 is 3 marks)

© Revision Library | revisionlibrary.co.uk

2 A population pyramid for Island E shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	130	200
20 to 39	330	270
40 to 59	310	150
60 and over	310	490

(a) Find the total number of males and the total number of females.

(b) Write the ratio males : females in its simplest form.

(Total for Question 2 is 3 marks)

---

3 A choropleth map shades each region by population density (people per square kilometre). Key: light = under 50, medium = 50 to under 100, dark = 100 to under 200, darkest = 200 or more.

Region	Area (square km)	Population
Jarrow	40	400
Calder	40	1800
Ashby	100	24000
Dunmore	200	6000
Garth	200	12000

(a) Work out the population density of Ashby.

(b) State the shading of Ashby on the map.

(c) How many of the five regions are shaded medium or lighter?

(Total for Question 3 is 4 marks)

© Revision Library | revisionlibrary.co.uk

4 A population pyramid for Village C shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	550	330
20 to 39	100	280
40 to 59	380	280
60 and over	490	310

(a) Find the total number of males and the total number of females.

(b) Write the ratio males : females in its simplest form.

(Total for Question 4 is 3 marks)

---

5 A population pyramid for Village C shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	260	300
20 to 39	460	400
40 to 59	130	370
60 and over	120	310

(a) Work out the number of people aged 60 and over.

(b) Write this as a percentage of the whole population. Give your answer to 1 decimal place.

(Total for Question 5 is 3 marks)

© Revision Library | revisionlibrary.co.uk

6 A choropleth map shades each region by population density (people per square kilometre). Key: light = under 50, medium = 50 to under 100, dark = 100 to under 200, darkest = 200 or more.

Region	Area (square km)	Population
Brook	250	22500
Garth	80	10400
Fenwick	100	1000
Ashby	50	6500
Jarrow	250	47500

(a) Work out the population density of Brook.

(b) State the shading of Brook on the map.

(c) How many of the five regions are shaded medium or lighter?

(Total for Question 6 is 4 marks)

© Revision Library | revisionlibrary.co.uk

7 A population pyramid for Village C shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	220	130
20 to 39	270	190
40 to 59	230	250
60 and over	420	260

(a) Find the total number of males and the total number of females.
(b) Write the ratio males : females in its simplest form.

(Total for Question 7 is 3 marks)

---

8 A population pyramid for Town A shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	560	410
20 to 39	430	250
40 to 59	400	440
60 and over	190	400

(a) Work out the total population of Town A.
(b) How many more females than males are aged 0 to 19? (Write the difference, with a negative sign if there are fewer females.)

(Total for Question 8 is 4 marks)

© Revision Library | revisionlibrary.co.uk

9 A choropleth map shades each region by population density (people per square kilometre). Key: light = under 50, medium = 50 to under 100, dark = 100 to under 200, darkest = 200 or more.

Region	Area (square km)	Population
Irwell	120	22800
Hale	40	400
Jarrow	200	18000
Calder	80	1600
Lowdale	200	9000

(a) Work out the population density of Lowdale.
(b) State the shading of Lowdale on the map.
(c) How many of the five regions are shaded medium or lighter?

(Total for Question 9 is 4 marks)

10 A population pyramid for Island E shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	520	210
20 to 39	150	530
40 to 59	510	290
60 and over	240	400

(a) Find the total number of males and the total number of females.
(b) Write the ratio males : females in its simplest form.

(Total for Question 10 is 3 marks)

© Revision Library | revisionlibrary.co.uk

11 A choropleth map shades each region by population density (people per square kilometre). Key: light = under 50, medium = 50 to under 100, dark = 100 to under 200, darkest = 200 or more.

Region	Area (square km)	Population
Ashby	40	1800
Kelby	250	15000
Garth	200	48000
Lowdale	200	48000
Jarrow	250	2500

(a) Work out the population density of Ashby.

(b) State the shading of Ashby on the map.

(c) How many of the five regions are shaded medium or lighter?

(Total for Question 11 is 4 marks)

© Revision Library | revisionlibrary.co.uk

12 A population pyramid for Region B shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	220	420
20 to 39	110	160
40 to 59	390	170
60 and over	290	250

(a) Find the total number of males and the total number of females.

(b) Write the ratio males : females in its simplest form.

(Total for Question 12 is 3 marks)

---

13 A choropleth map shades each region by population density (people per square kilometre). Key: light = under 50, medium = 50 to under 100, dark = 100 to under 200, darkest = 200 or more.

Region	Area (square km)	Population
Dunmore	200	9000
Brook	80	2400
Hale	250	27500
Irwell	40	3600
Fenwick	40	800

(a) Work out the population density of Brook.

(b) State the shading of Brook on the map.

(c) How many of the five regions are shaded medium or lighter?

(Total for Question 13 is 4 marks)

© Revision Library | revisionlibrary.co.uk

14 A population pyramid for Island E shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	210	110
20 to 39	450	340
40 to 59	480	150
60 and over	410	410

(a) Work out the total population of Island E.

(b) How many more females than males are aged 60 and over? (Write the difference, with a negative sign if there are fewer females.)

(Total for Question 14 is 4 marks)

---

15 A population pyramid for Village C shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	590	490
20 to 39	510	380
40 to 59	540	440
60 and over	210	580

(a) Work out the number of people aged 60 and over.

(b) Write this as a percentage of the whole population. Give your answer to 1 decimal place.

(Total for Question 15 is 3 marks)

© Revision Library | revisionlibrary.co.uk

16 A choropleth map shades each region by population density (people per square kilometre). Key: light = under 50, medium = 50 to under 100, dark = 100 to under 200, darkest = 200 or more.

Region	Area (square km)	Population
Fenwick	120	19200
Brook	50	500
Ashby	80	19200
Eastvale	40	9600
Irwell	250	22500

(a) Work out the population density of Ashby.
(b) State the shading of Ashby on the map.
(c) How many of the five regions are shaded medium or lighter?

(Total for Question 16 is 4 marks)

17 A population pyramid for Village C shows the number of males (left) and females (right) in each age group.

Age group	Males	Females
0 to 19	260	320
20 to 39	400	520
40 to 59	120	290
60 and over	430	550

(a) Work out the number of people aged 60 and over.
(b) Write this as a percentage of the whole population. Give your answer to 1 decimal place.

(Total for Question 17 is 3 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 2.20 Choropleth Maps: 1-hour Pack

Question 1

males 1920, females 1500	**B1**
divides by a common factor	**M1**
32 : 25 cao	**A1**

Answer: (a) 1920, 1500; (b) 32 : 25

Question 2

males 1080, females 1110	**B1**
divides by a common factor	**M1**
36 : 37 cao	**A1**

Answer: (a) 1080, 1110; (b) 36 : 37

Question 3

population divided by area	**M1**
240 cao	**A1**
darkest (follows from their density)	**B1**
4 cao	**B1**

Answer: (a) 240; (b) darkest; (c) 4

Question 4

males 1520, females 1200	**B1**
divides by a common factor	**M1**
19 : 15 cao	**A1**

Answer: (a) 1520, 1200; (b) 19 : 15

Question 5

430 cao	**B1**
430 / 2350 x 100	**M1**
18.3% cao	**A1**

Answer: (a) 430; (b) 18.3%

Question 6

population divided by area	**M1**
90 cao	**A1**
medium (follows from their density)	**B1**
2 cao	**B1**

Answer: (a) 90; (b) medium; (c) 2

Question 7

males 1140, females 830	**B1**
divides by a common factor	**M1**
114 : 83 cao	**A1**

Answer: (a) 1140, 830; (b) 114 : 83

Question 8

adds all eight values	**M1**
3080 cao	**A1**
female minus male for the age group	**M1**
-150 cao	**A1**

Answer: (a) 3080; (b) -150

Question 9

population divided by area	**M1**
45 cao	**A1**
light (follows from their density)	**B1**
4 cao	**B1**

Answer: (a) 45; (b) light; (c) 4

Question 10

males 1420, females 1430	**B1**
divides by a common factor	**M1**
142 : 143 cao	**A1**

Answer: (a) 1420, 1430; (b) 142 : 143

Question 11

population divided by area	**M1**
45 cao	**A1**
light (follows from their density)	**B1**
3 cao	**B1**

Answer: (a) 45; (b) light; (c) 3

Question 12

males 1010, females 1000	**B1**
divides by a common factor	**M1**
101 : 100 cao	**A1**

Answer: (a) 1010, 1000; (b) 101 : 100

Question 13

population divided by area	**M1**
30 cao	**A1**
light (follows from their density)	**B1**
4 cao	**B1**

Answer: (a) 30; (b) light; (c) 4

Question 14

adds all eight values	**M1**
2560 cao	**A1**
female minus male for the age group	**M1**
0 cao	**A1**

Answer: (a) 2560; (b) 0

Question 15

790 cao	**B1**
790 / 3740 x 100	**M1**
21.1% cao	**A1**

Answer: (a) 790; (b) 21.1%

Question 16

population divided by area	**M1**
240 cao	**A1**
darkest (follows from their density)	**B1**
2 cao	**B1**

Answer: (a) 240; (b) darkest; (c) 2

© Revision Library | revisionlibrary.co.uk

Question 17

980 cao	**B1**
980 / 2890 x 100	**M1**
33.9% cao	**A1**

Answer: (a) 980; (b) 33.9%

© Revision Library | revisionlibrary.co.uk