

OXFORD CAMBRIDGE AND RSA EXAMINATIONS
A2 GCE

4754B

MATHEMATICS (MEI)

Booklet of Tables and Figures for use with 4754B
Applications of Advanced Mathematics (C4)
Paper B: Comprehension

MODIFIED ENLARGED

YEAR	1804	1927	1960	1974	1987	1999	2011
POPULATION (BILLIONS)	1	2	3	4	5	6	7

Table 1 World population

population
(billions)

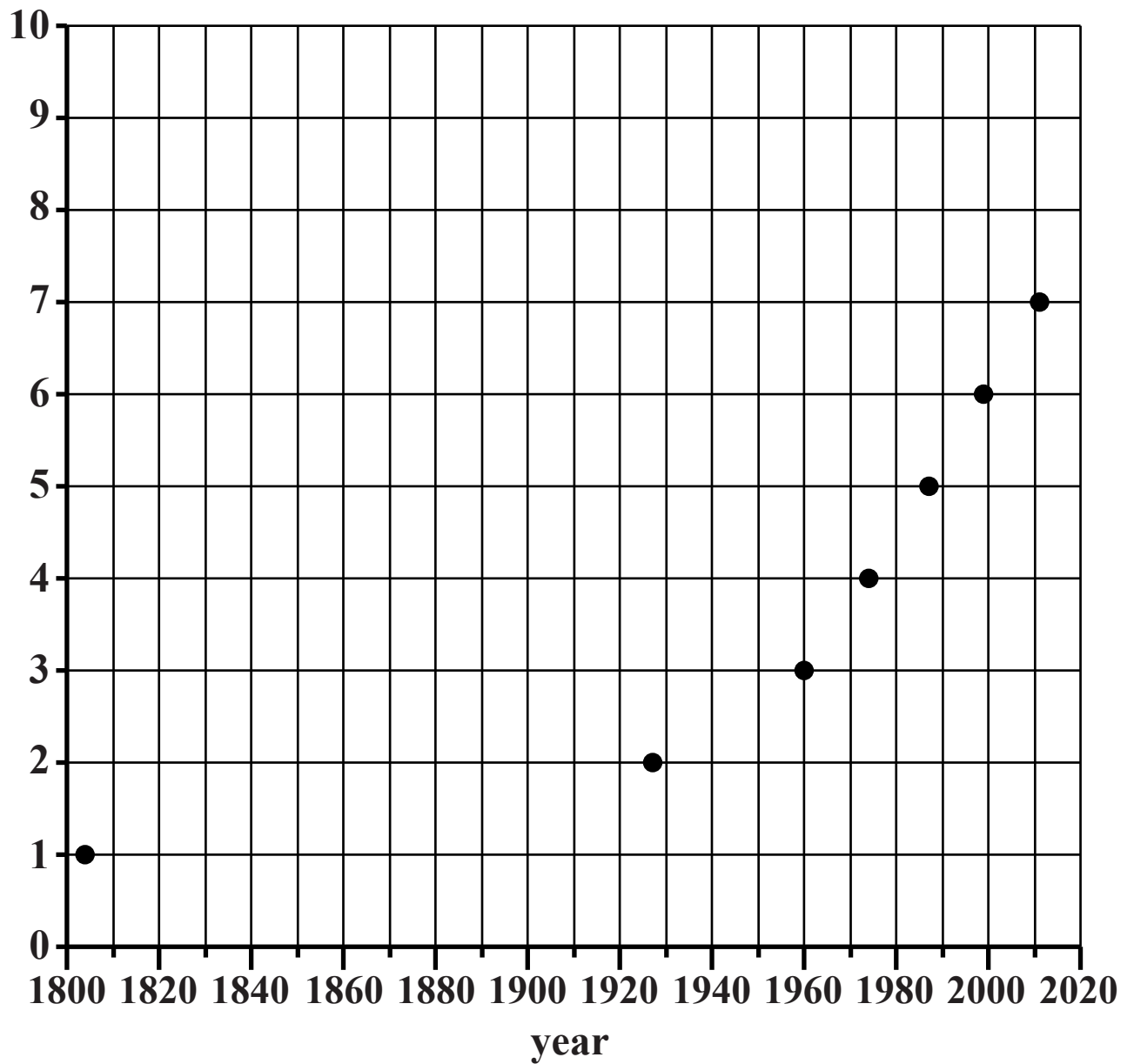


Fig. 2 World population from 1800 to the present

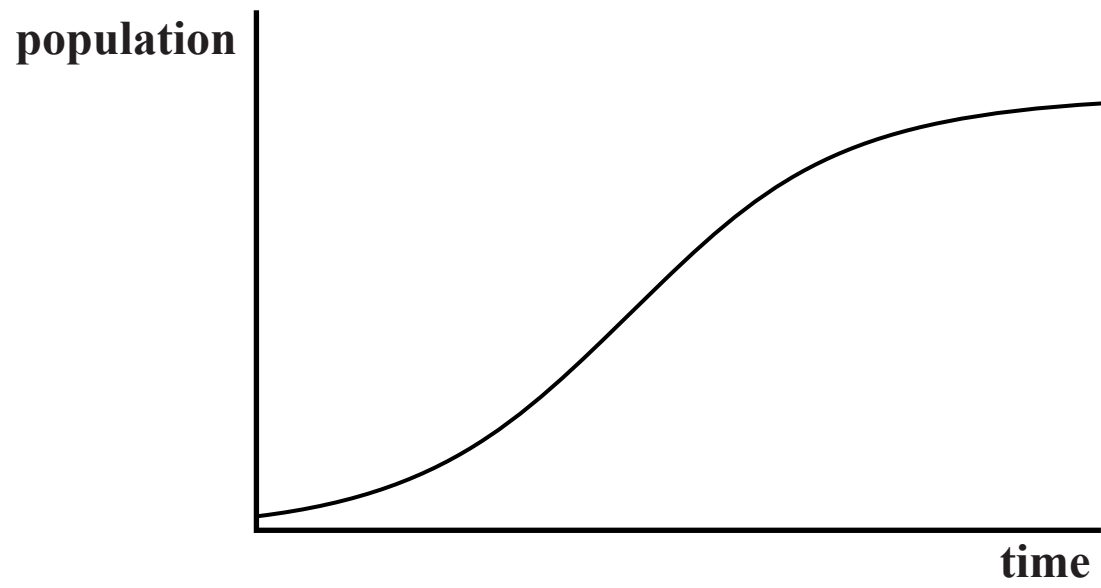


Fig. 3 The logistic model

POPULATION PROFILES

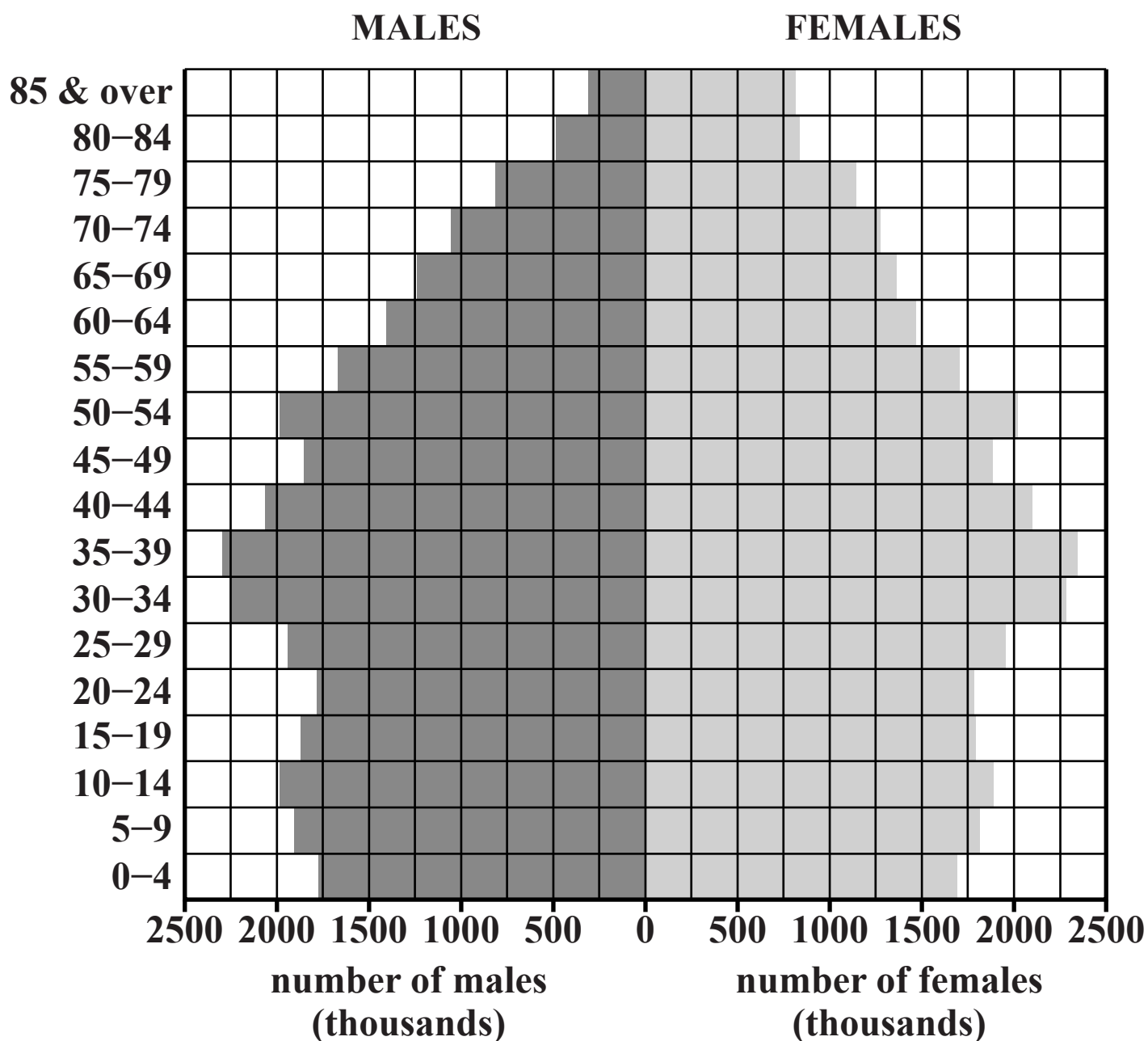


Fig. 4 Population profile of the UK in 2001

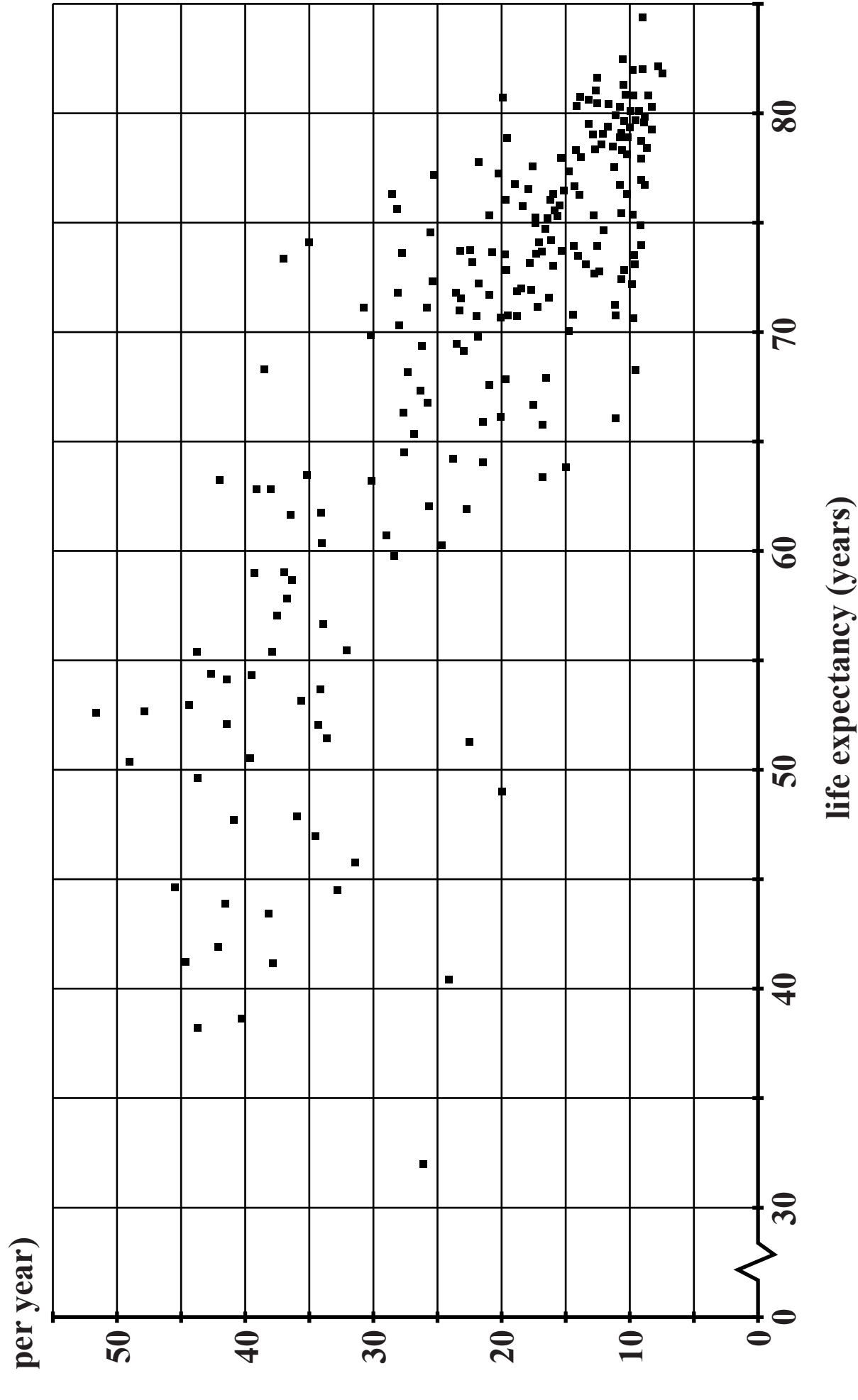
AGE GROUP	2010		2030
80+	1		?
60–79	10		?
40–59	20		20
20–39	20		20
0–19	20		?
TOTAL	71		?

**Table 5 Population profile of an imaginary country
(in millions)**

Age group	2010	2030	2050	2070	2090	2110
80+	1	4	6.4	6.4	6.4	5.76
60–79	10	16	16	16	14.4	12.96
40–59	20	20	20	18	16.2	14.58
20–39	20	20	18	16.2	14.58	13.12
0–19	20	18	16.2	14.58	13.12	11.81
Total	71	78	76.6	71.18	64.7	58.23

Table 6 Population profile of an imaginary country (in millions, to 4 significant figures)

Fig. 7 Scatter diagram showing birth rate against life expectancy for the countries of the world



COUNTRY	LIFE EXPECTANCY	BIRTH RATE
Japan	82.12	7.64
Sweden	80.86	10.13
Italy	80.20	8.18
UK	79.01	10.65
USA	78.11	13.82
Tunisia	75.78	15.42
Jamaica	73.53	19.68
China	73.47	14.00
Brazil	71.99	18.43
India	69.89	21.76
Bangladesh	60.25	24.68
Ghana	59.85	28.58
Uganda	52.72	47.84
Afghanistan	44.64	45.46

Table 8 Life expectancy and birth rates of selected countries (2009)