



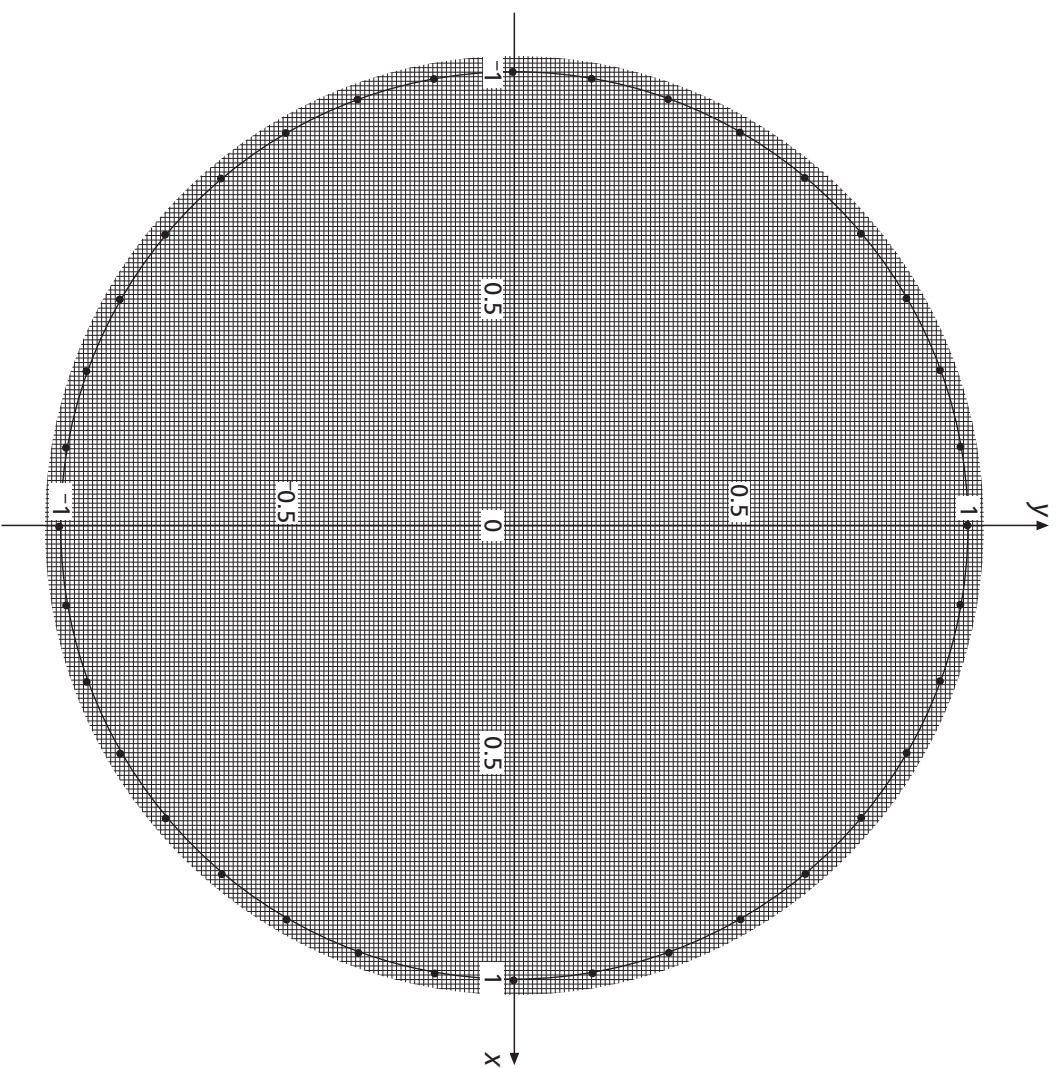
for **AQA, Edexcel** and **OCR**  
**two-tier GCSE mathematics**

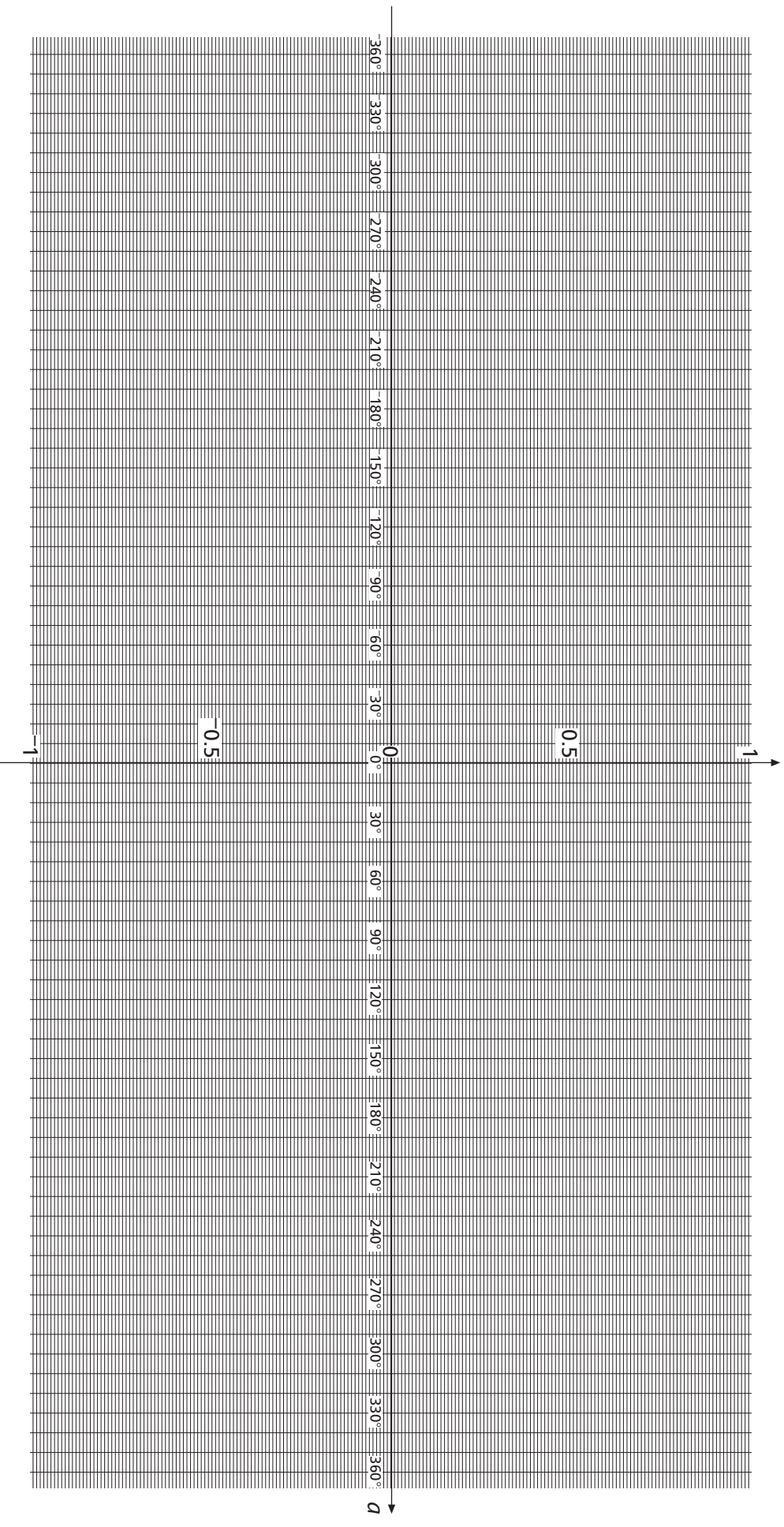
## **Resource sheets for *Higher 2***

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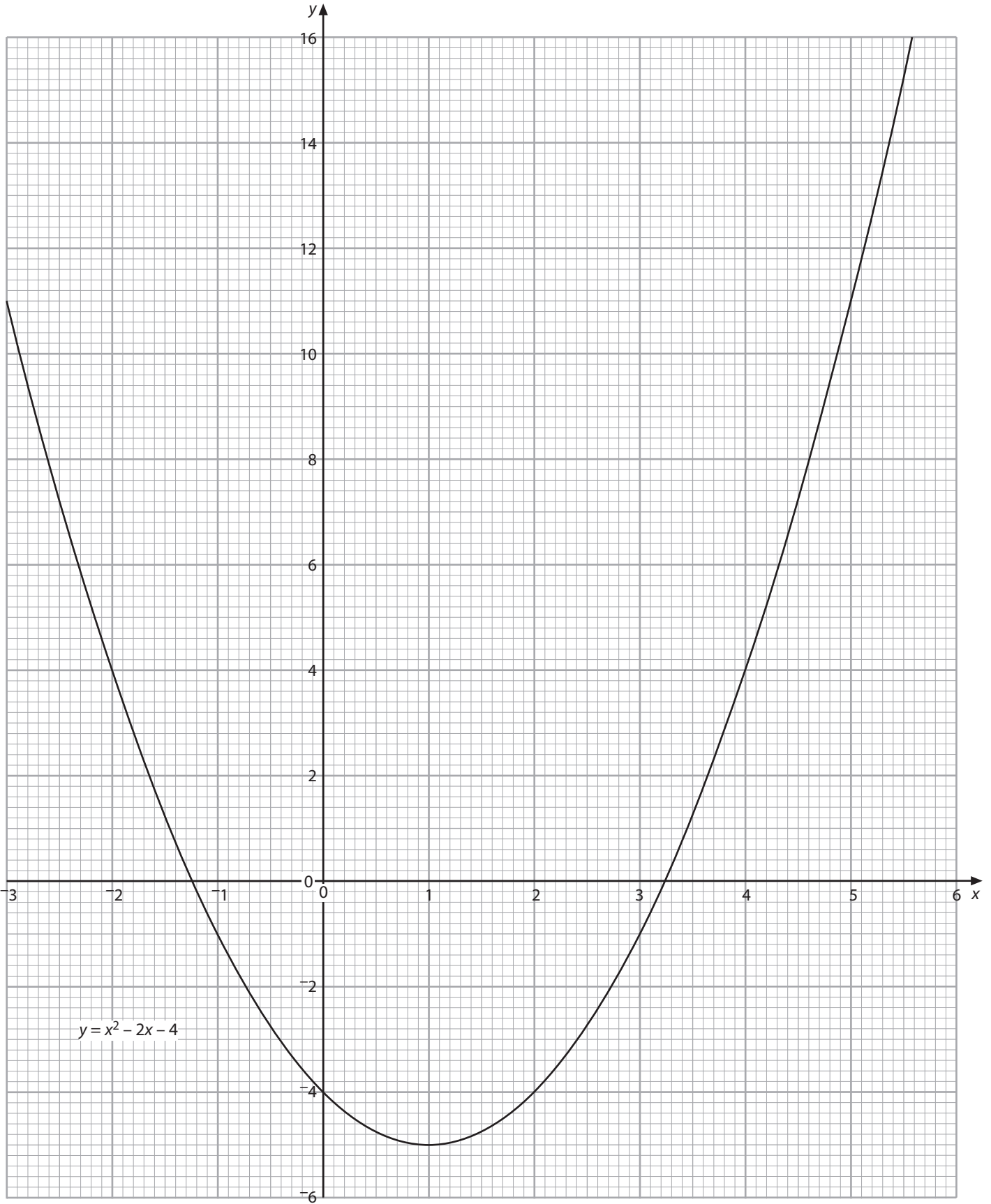
**[www.smpmaths.org.uk](http://www.smpmaths.org.uk)**

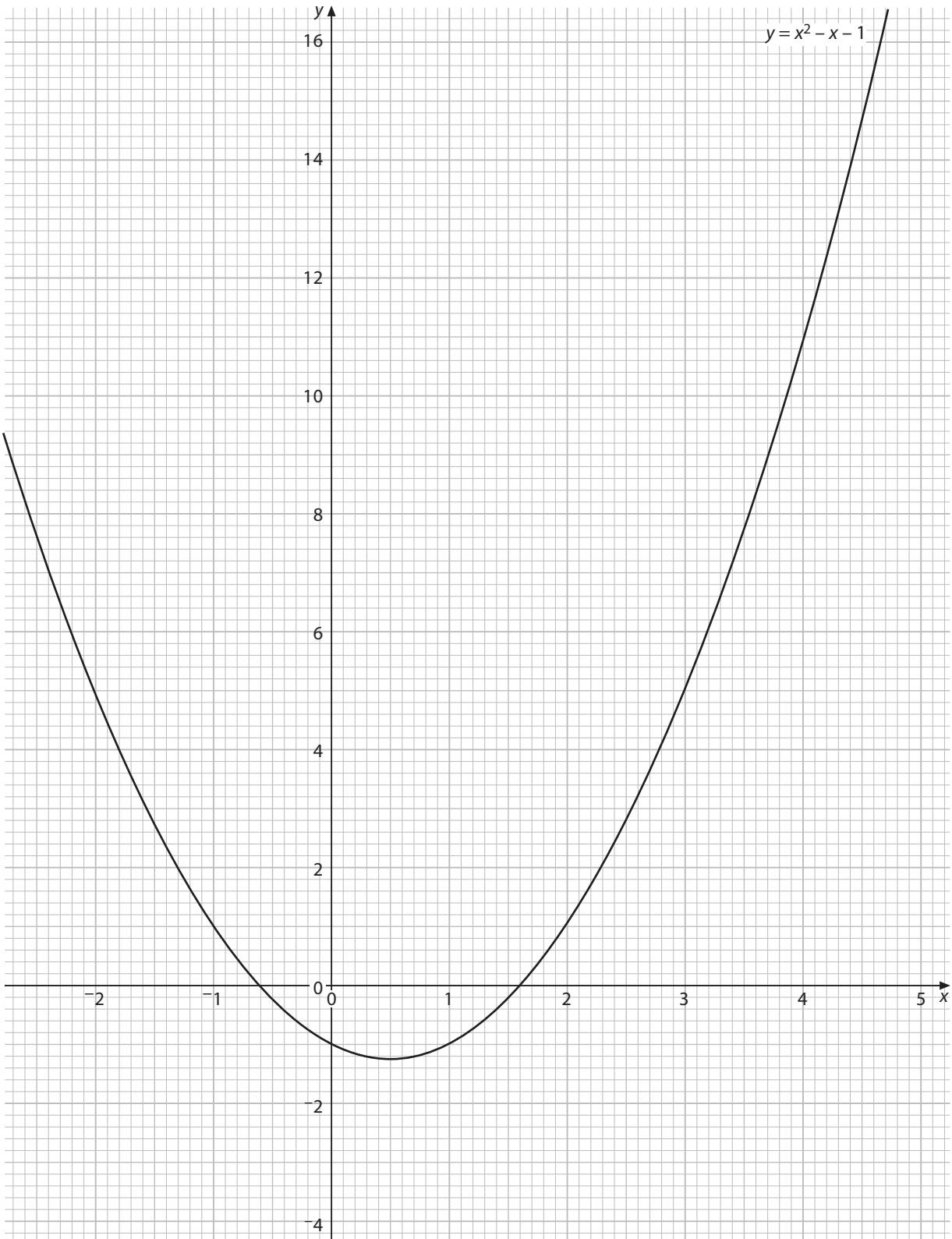




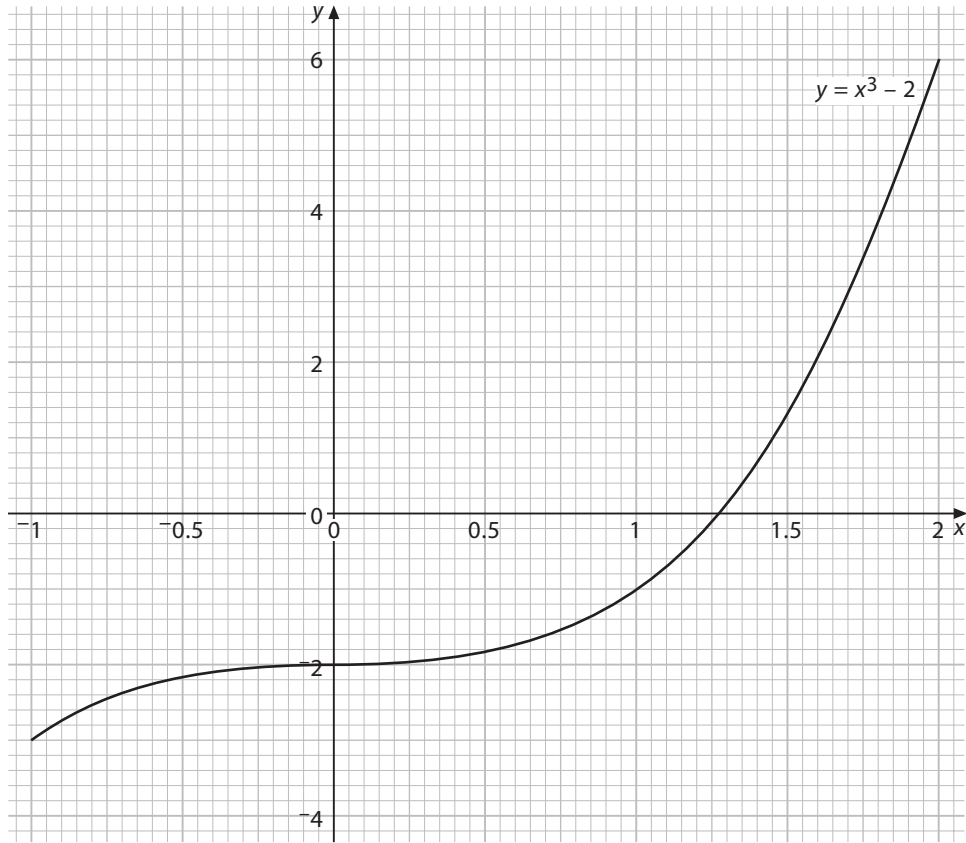
**Weights of 250 female elephants**

Elephant	Weight (tonnes)	Elephant	Weight (tonnes)	Elephant	Weight (tonnes)	Elephant	Weight (tonnes)	Elephant	Weight (tonnes)
1	1.33	51	1.33	101	0.97	151	0.90	201	1.04
2	1.31	52	1.45	102	0.47	152	1.59	202	0.54
3	1.35	53	1.26	103	0.58	153	1.26	203	0.66
4	1.40	54	1.25	104	0.61	154	1.37	204	0.68
5	1.34	55	1.34	105	0.63	155	0.95	205	0.71
6	1.37	56	1.47	106	0.71	156	1.13	206	0.79
7	1.36	57	1.01	107	0.79	157	1.30	207	0.86
8	1.39	58	1.42	108	0.83	158	1.39	208	0.90
9	1.27	59	1.34	109	0.91	159	0.77	209	0.99
10	0.62	60	1.02	110	0.96	160	1.31	210	1.03
11	1.05	61	0.92	111	0.99	161	0.73	211	1.06
12	1.24	62	1.62	112	1.01	162	0.93	212	1.08
13	1.55	63	1.28	113	1.05	163	1.32	213	1.12
14	1.23	64	1.39	114	1.06	164	1.25	214	1.14
15	0.90	65	0.97	115	1.06	165	0.55	215	1.14
16	1.32	66	1.16	116	1.16	166	1.30	216	1.23
17	1.25	67	1.33	117	1.20	167	0.65	217	1.27
18	1.14	68	1.42	118	1.20	168	1.14	218	1.28
19	0.95	69	0.79	119	1.25	169	0.52	219	1.32
20	1.35	70	1.33	120	1.25	170	1.28	220	1.32
21	1.47	71	0.75	121	1.26	171	1.27	221	1.33
22	1.28	72	0.95	122	1.26	172	1.30	222	1.34
23	1.28	73	1.34	123	1.29	173	1.35	223	1.36
24	1.37	74	1.28	124	1.29	174	1.29	224	1.37
25	1.49	75	0.57	125	1.30	175	1.33	225	1.37
26	1.03	76	1.33	126	1.32	176	1.31	226	1.39
27	1.44	77	0.67	127	1.32	177	1.34	227	1.39
28	1.37	78	1.16	128	1.33	178	1.22	228	1.40
29	1.05	79	0.54	129	1.34	179	0.57	229	1.41
30	0.94	80	1.31	130	1.35	180	1.00	230	1.42
31	1.64	81	1.29	131	1.35	181	1.19	231	1.43
32	1.30	82	1.33	132	1.37	182	1.50	232	1.44
33	1.42	83	1.38	133	1.37	183	1.19	233	1.44
34	0.99	84	1.32	134	1.37	184	0.85	234	1.44
35	1.18	85	1.35	135	1.37	185	1.27	235	1.44
36	1.35	86	1.34	136	1.37	186	1.20	236	1.45
37	1.44	87	1.37	137	1.37	187	1.10	237	1.45
38	0.81	88	1.25	138	1.38	188	0.90	238	1.45
39	1.36	89	0.60	139	1.38	189	1.30	239	1.46
40	0.77	90	1.03	140	1.38	190	1.42	240	1.46
41	0.97	91	1.22	141	1.39	191	1.24	241	1.46
42	1.36	92	1.53	142	1.40	192	1.23	242	1.48
43	1.30	93	1.21	143	1.41	193	1.32	243	1.49
44	0.59	94	0.88	144	1.43	194	1.45	244	1.51
45	1.35	95	1.30	145	1.46	195	0.99	245	1.53
46	0.70	96	1.23	146	1.46	196	1.39	246	1.53
47	1.19	97	1.12	147	1.49	197	1.32	247	1.56
48	0.57	98	0.93	148	1.51	198	1.00	248	1.58
49	0.45	99	1.33	149	1.57	199	0.90	249	1.64
50	1.23	100	1.45	150	1.66	200	1.59	250	1.73

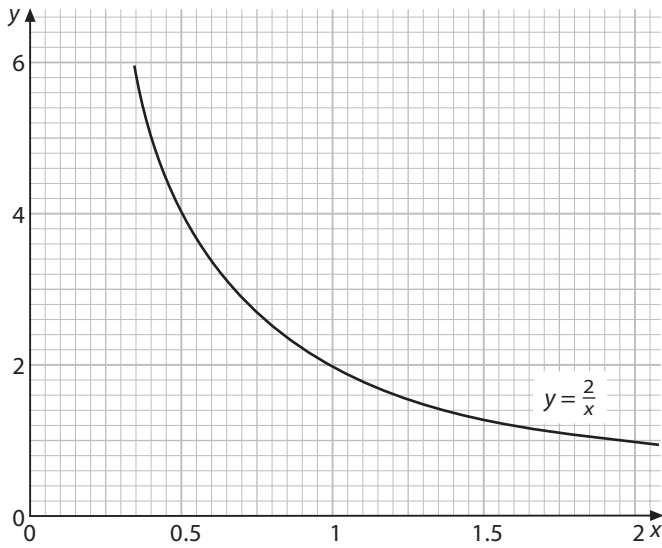




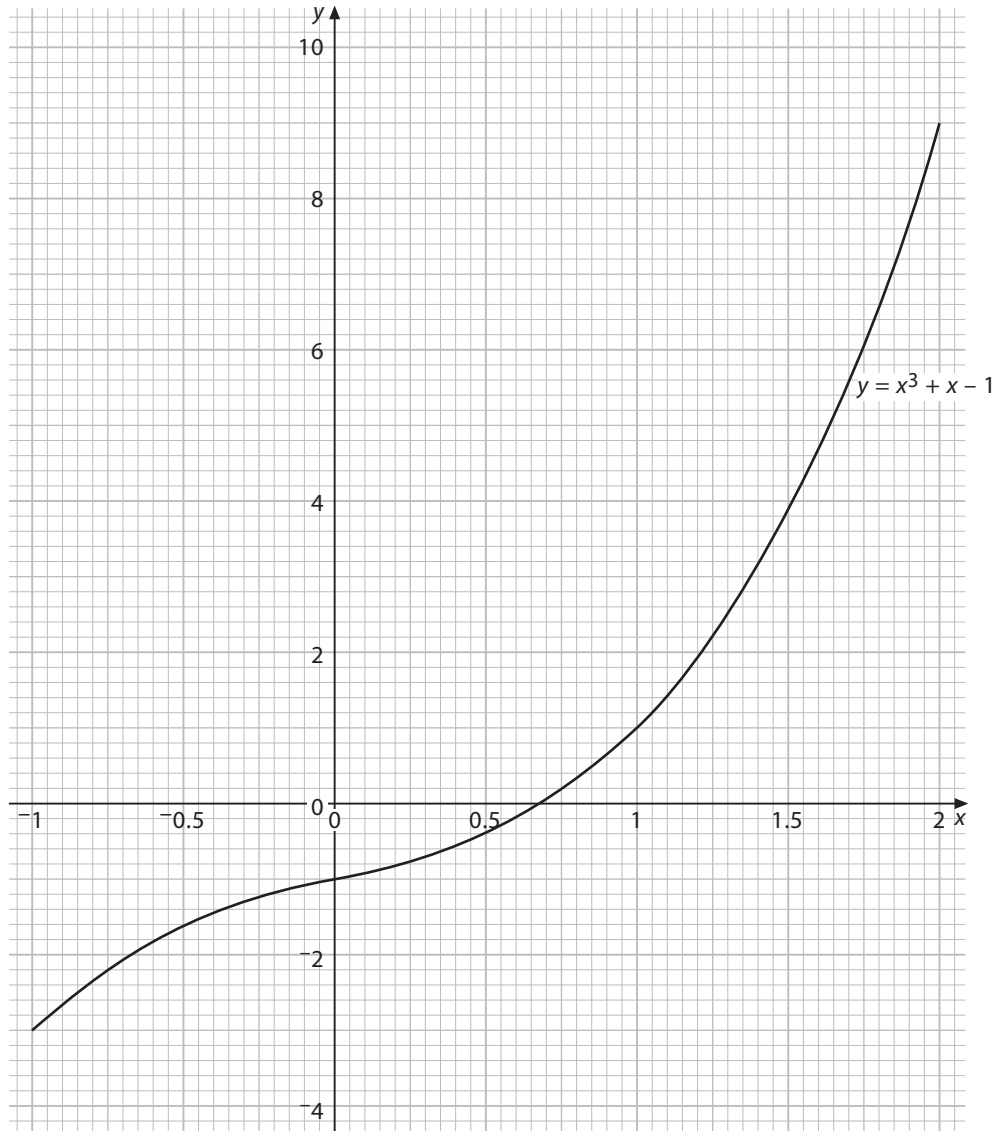
**C5**



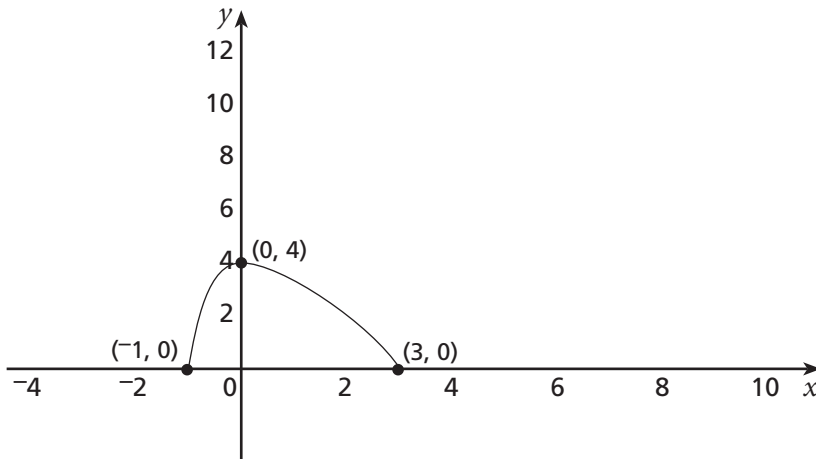
**C6**



T2



The diagram shows part of the graph of  $y = f(x)$ .



On the axes below, sketch the graphs of

- (a)  $y = 3f(x)$                       (b)  $y = f(3x)$                       (c)  $y = f(x + 3)$

Indicate clearly the new positions of the points  $(-1, 0)$ ,  $(0, 4)$  and  $(3, 0)$  for each function.

- (a)  $y = 3f(x)$

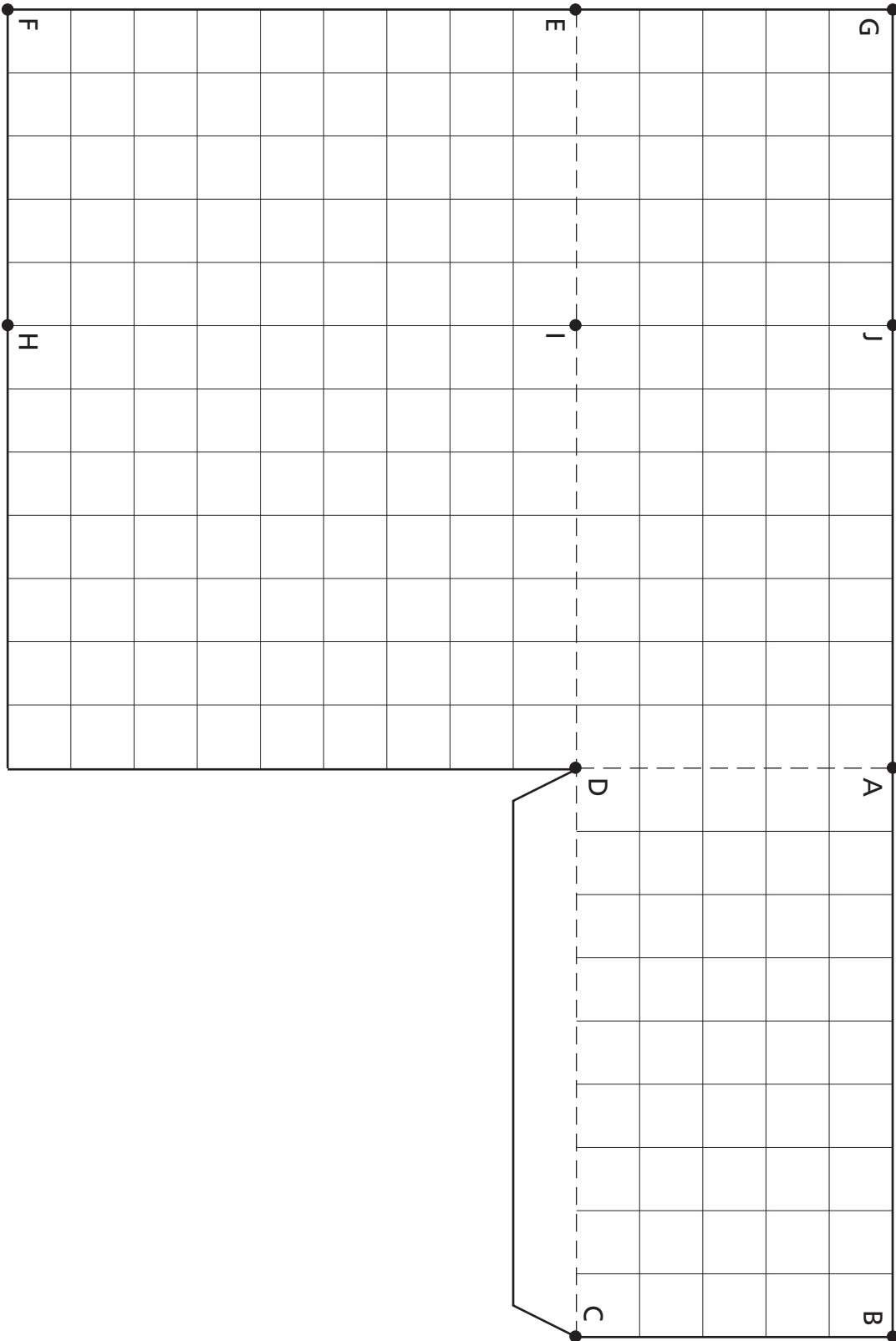


- (b)  $y = f(3x)$



- (c)  $y = f(x + 3)$





Check that this line is 100 mm long and if not adjust print scaling before using sheet.