

Brain Teasers 3 — Answers

Test 1	Test 2	Test 3	Test 4	Test 5
1 9	1 1	1 16	1 (d)	1 19
2 13c	2 1	2 $\frac{1}{2}$	2 4	2 4
3 15	3 47	3 2	3 12	3 43
4 5	4 19c	4 10	4 1c	4 74
5 3	5 4	5 >	5 8	5 40
6 24	6 1	6 43	6 $\frac{1}{4}$	6 4
7 28	7 7	7 $\frac{1}{4}$	7 37c	7 4
8 37	8 8	8 20c	8 12	8 16
9 5	9 40	9 100	9 9c	9 56c
10 7	10 15	10 (b)	10 20c	10 $\frac{1}{4}$

Test 6	Test 7	Test 8	Test 9	Test 10
1 135	1 19	1 4c	1 227	1 314
2 12	2 2	2 3 tens	2 390	2 417
3 60	3 46	3 (b)	3 81	3 227
4 (c)	4 8	4 19cm	4 251	4 201
5 (c)	5 24c	5 10	5 378	5 298
6 10c	6 1c	6 $\frac{1}{2}$	6 235	6 356
7 3	7 3c	7 1	7 843	7 488
8 60	8 (b)	8 4c	8 50	8 375
9 9	9 30	9 €1.25	9 253	9 865
10 (a)	10 5	10 18	10 943	10 600

Test 11	Test 12	Test 13	Test 14	Test 15
1 60	1 4	1 27	1 600	1 700
2 447	2 90	2 15	2 600	2 47
3 658	3 3	3 13	3 748	3 79
4 508	4 23	4 19	4 879	4 246
5 483	5 23	5 301	5 60	5 10
6 677	6 $\frac{1}{4}$	6 42	6 54	6 386
7 974	7 187	7 391	7 398	7 (a)
8 499	8 160	8 709	8 59	8 801
9 680	9 10c	9 25	9 41	9 146
10 661	10 24c	10 898	10 31	10 459

Test 16	Test 17	Test 18	Test 19	Test 20
1 78	1 Renault	1 lemon	1 400	1 107
2 25	2 Honda	2 lime	2 901	2 >
3 34c	3 13	3 5	3 387	3 406
4 4	4 10	4 15	4 755	4 $\frac{3}{4}$
5 70 mins	5 24	5 15	5 873	5 101
6 $\frac{1}{2}$	6 4	6 20	6 516	6 41
7 €1.75	7 2	7 40	7 23	7 2
8 $\frac{1}{2}$	8 25	8 45	8 367	8 $\frac{1}{4}$
9 90	9 4	9 5	9 24	9 3
10 12c	10 55	10 5	10 37	10 20c

Test 21	Test 22	Test 23	Test 24	Test 25
1 16	1 18	1 8	1 92c	1 (d)
2 28	2 32	2 41	2 25	2 true
3 36	3 24	3 35	3 18c	3 (d)
4 48	4 39	4 28	4 3	4 1
5 72	5 80	5 32	5 37	5 cuboid *
6 62	6 7	6 9	6 93	6 6
7 6	7 9	7 75	7 5	7 false
8 5	8 9	8 48	8 6	8 8
9 8	9 8	9 4	9 15c	9 12
10 7	10 3	10 34	10 16	10 (c)

* In July 2004 edition (b) should read cuboid (not sphere)

Test 26	Test 27	Test 28	Test 29	Test 30
1 (b)	1 24	1 732	1 30c	1 36c
2 2	2 40c	2 15c	2 36c	2 13
3 3	3 900	3 57c	3 56c	3 €1.50
4 (b)	4 601	4 26	4 28c	4 37c
5 6	5 8	5 435	5 75c	5 20c
6 12	6 194	6 $\frac{3}{4}$	6 14c	6 €2.80
7 5	7 27	7 12	7 9	7 €1.35
8 8	8 436	8 2c	8 80c	8 10c
9 6	9 70	9 60	9 11c	9 €2.25
10 8	10 (d)	10 12c	10 15c	10 20c

Test 31	Test 32	Test 33	Test 34	Test 35
1 72	1 12	1 15	1 7	1 56
2 45c	2 43	2 8	2 40	2 7
3 7	3 9	3 5	3 $\frac{3}{4}$	3 80
4 71	4 64c	4 14	4 9	4 8
5 11	5 7	5 22	5 12	5 48
6 25c	6 6	6 36	6 8	6 62c
7 56	7 55c	7 48	7 €32	7 88c
8 9	8 55	8 $\frac{1}{2}$	8 €27	8 25c
9 8c	9 €3·80	9 18	9 8	9 32
10 85c	10 40c	10 45	10 6	10 7

Test 36	Test 37	Test 38	Test 39	Test 40
1 4	1 36	1 48	1 289	1 5
2 57	2 36	2 44	2 478	2 87c
3 24	3 76	3 55	3 7	3 $\frac{3}{4}$
4 64	4 49	4 83	4 2	4 $\frac{1}{2}$
5 8	5 467	5 750	5 $\frac{3}{8}$	5 20c
6 35c	6 901	6 435	6 $\frac{5}{8}$	6 20
7 49	7 599	7 452	7 6	7 27
8 6	8 81	8 482	8 40	8 (d)
9 48	9 62	9 378	9 70	9 82
10 8	10 47	10 887	10 48c	10 608

Test 41	Test 42	Test 43	Test 44	Test 45
1 95cm	1 324cm	1 225c	1 75c	1 cylinder
2 124cm	2 16m	2 25	2 (b)	2 62
3 2m 78cm	3 (a)	3 24	3 98c	3 676
4 200cm	4 80m	4 48c	4 65	4 6
5 1m 44cm	5 208cm	5 8	5 26c	5 28
6 1m 45cm	6 50cm	6 4cm	6 31c	6 98
7 450cm	7 25cm	7 370	7 15	7 75
8 3m 55cm	8 11cm	8 462	8 4	8 369
9 35cm	9 1m 22cm	9 24	9 471	9 400m
10 6m 50cm	10 2m 60cm	10 3m	10 10	10 14c

Test 46	Test 47	Test 48	Test 49	Test 50
1 22cm	1 348c	1 817	1 21	1 81c
2 11	2 29c	2 40	2 30	2 79
3 32	3 67c	3 353	3 54	3 8
4 58c	4 cone	4 4	4 63	4 9
5 650	5 4m	5 pyramid	5 50	5 13
6 cube	6 7c	6 10c	6 81c	6 6
7 45	7 3m 29c	7 43	7 7	7 9
8 40	8 8	8 90	8 5	8 2
9 7	9 28	9 513	9 8	9 11
10 361	10 2c	10 75c	10 63	10 6

Test 51	Test 52	Test 53	Test 54	Test 55
1 60	1 9	1 60	1 9:15	1 15
2 88	2 28	2 30	2 45	2 12:25
3 18c	3 7	3 15	3 11:40	3 45 mins
4 16c	4 €72	4 6:30	4 20	4 42c
5 68	5 6	5 8:20	5 9:55	5 84
6 8	6 8	6 1:45	6 3:40	6 15c
7 45	7 45c	7 3:35	7 55	7 5
8 40c	8 €2.60	8 20 mins	8 9:40	8 5:45
9 8	9 3	9 3:50	9 20	9 7
10 8	10 50c	10 3:25	10 5:20	10 3:55

Test 56	Test 57	Test 58	Test 59	Test 60
1 14	1 yes	1 2	1 scissors	1 742
2 45c	2 yes	2 4	2 past	2 to
3 72	3 2	3 12	3 801	3 932
4 20	4 2	4 6	4 447cm	4 899
5 95c	5 knife	5 24	5 70 mins	5 $\frac{3}{10}$
6 32	6 4	6 70	6 246cm	6 $\frac{7}{10}$
7 52c	7 2	7 28	7 9	7 72cm
8 9	8 15	8 2	8 8m	8 €1.73
9 23	9 64	9 6	9 37c	9 42
10 35	10 36	10 18	10 9	10 7

Test 61	Test 62	Test 63	Test 64	Test 65
1 2	1 10	1 8	1 67	1 0·1
2 5	2 €56	2 28	2 63c	2 0·3
3 40	3 €36	3 17	3 18	3 $\frac{7}{10}$
4 €70	4 $1\frac{3}{4}$	4 6	4 16	4 0·9
5 5	5 24	5 50	5 30	5 0·2
6 $1\frac{1}{2}$	6 3	6 16	6 72	6 1·7
7 €3	7 €36	7 95c	7 20c	7 1·6
8 €90	8 15	8 17	8 16	8 2·1
9 30	9 5	9 8	9 54	9 70
10 6	10 88	10 25	10 €81	10 80c

Test 66	Test 67	Test 68	Test 69	Test 70
1 0·9	1 2·9	1 72c	1 57	1 44
2 1·7	2 2·5	2 62	2 63	2 6
3 0·7	3 70	3 3·7	3 8	3 49
4 0·3	4 9	4 63	4 7	4 8c
5 90	5 64c	5 32c	5 6	5 30
6 6	6 72	6 25	6 41	6 10
7 0·8	7 4·2	7 11	7 5	7 9
8 2·7	8 €4	8 0·4	8 9	8 59
9 6·1	9 3:40	9 90	9 20	9 70c
10 6	10 35	10 54	10 4	10 8

Test 71	Test 72	Test 73	Test 74	Test 75
1 4·9	1 15	1 30ml	1 250ml	1 350ml
2 70	2 71	2 150ml	2 750ml	2 40c
3 75c	3 24c	3 400ml	3 800ml	3 800ml
4 18	4 13	4 550ml	4 600ml	4 72
5 €72	5 16c	5 750ml	5 20	5 4·9
6 70	6 80	6 2	6 10	6 600ml
7 30c	7 10c	7 4	7 500ml	7 80
8 7	8 5	8 700ml	8 €1·20	8 10c
9 8	9 €3·20	9 600ml	9 10	9 90
10 35 mins	10 9	10 4	10 6	10 72

Test 76	Test 77	Test 78	Test 79	Test 80
1 6	1 0.3	1 200ml	1 $\frac{1}{2}$	1 880
2 650ml	2 0.7	2 348cm	2 346c	2 797
3 70	3 59	3 400	3 389	3 27
4 3.3	4 9	4 20c	4 11	4 $\frac{7}{8}$
5 6:50	5 259	5 9	5 9	5 111
6 5.1	6 220	6 2.7	6 869	6 €1.08
7 €27	7 450ml	7 13	7 €1.20	7 63m
8 90	8 8	8 25	8 sphere	8 28
9 700ml	9 87 mins	9 6	9 $\frac{1}{4}$	9 800
10 €40	10 cube	10 40	10 46	10 9

Test 81	Test 82	Test 83	Test 84	Test 85
1 (c)	1 6	1 €1.13	1 56	1 653c
2 4	2 (a)	2 0.7	2 31	2 €3.54
3 (b)	3 semi-circle	3 0.3	3 20	3 €2.13
4 (b)	4 4	4 oval	4 88c	4 €1.20
5 (b)	5 2	5 6	5 35c	5 22c
6 (a)	6 (b)	6 32	6 60c	6 48c
7 yes	7 circle	7 15	7 56	7 €1
8 5	8 no	8 8	8 18	8 54c
9 (c)	9 5	9 22cm	9 6	9 €1.30
10 semi-circle	10 (b)	10 4	10 24c	10 28c

Test 86	Test 87	Test 88	Test 89	Test 90
1 €3.54	1 679	1 903	1 51	1 9 R 6
2 €5.85	2 700	2 472cm	2 8	2 630
3 €1.25	3 26l	3 hexagon	3 7 R 5	3 12
4 29c	4 40	4 31	4 16	4 240
5 88c	5 40	5 7	5 55c	5 180
6 8c	6 14	6 25	6 550	6 €3.80
7 20c	7 pyramid	7 €1.10	7 6	7 74
8 6	8 19kg	8 42	8 €1.70	8 20c
9 50c	9 602	9 48	9 75	9 12
10 45c	10 32	10 €1.60	10 4	10 69

Test 91	Test 92	Test 93	Test 94	Test 95
1 42	1 400ml	1 25	1 100	1 84
2 9	2 850ml	2 70	2 50	2 6 R 5
3 9 R 7	3 238	3 1:55	3 105 mins	3 450
4 8	4 11:40	4 80	4 5:35	4 6
5 90c	5 35	5 90 mins	5 4:50	5 850ml
6 9:35	6 81	6 2:50	6 May	6 20c
7 62	7 6·3	7 3:10	7 3	7 110 mins
8 6	8 €90	8 3:15	8 10:25	8 15
9 8	9 9	9 45 mins	9 5:10	9 75 mins
10 10c	10 €77	10 4:50	10 65 mins	10 8 R 6

Test 96	Test 97	Test 98	Test 99	Test 100
1 90	1 450g	1 800g	1 84	1 95 mins
2 25	2 750g	2 450g	2 8	2 15
3 550ml	3 850g	3 900g	3 8 R 6	3 5·3
4 10	4 700g	4 300g	4 6	4 9·7
5 115 mins	5 550g	5 6	5 8:20	5 9 R 7
6 €1·10	6 4	6 €8·80	6 8	6 950g
7 75 mins	7 10	7 10	7 80	7 250g
8 28	8 4	8 12kg	8 €63	8 8
9 7	9 €4·40	9 600g	9 €2·40	9 9 R 6
10 9 R 6	10 12	10 €8	10 €6	10 20c

Test 101	Test 102	Test 103	Test 104	Test 105
1 26	1 9	1 12	1 39	1 72c
2 27	2 175	2 53	2 €2·60	2 20
3 43	3 54	3 85	3 €1·55	3 48
4 75	4 10	4 €1·25	4 7	4 46
5 7	5 4	5 13·7	5 88	5 14
6 6	6 13	6 950g	6 5	6 20c
7 62	7 47	7 2	7 €40	7 9
8 7	8 91	8 55	8 7	8 0·7
9 10	9 4	9 10	9 9	9 8
10 30	10 66	10 4:25	10 €45	10 €1·10

Test 106	Test 107	Test 108	Test 109	Test 110
1 69	1 7·1	1 63c	1 62	1 63
2 53	2 66	2 5	2 165cm	2 5·6
3 32	3 €1·90	3 24	3 9:35	3 11·50
4 4:45	4 7:35	4 850g	4 90	4 18
5 €48	5 €60	5 4:15	5 9 R 7	5 88c
6 30cm	6 8 R 6	6 80	6 450	6 €36
7 7	7 €1·60	7 30c	7 8 R 6	7 11
8 €2·70	8 €7	8 €60	8 30c	8 7
9 7	9 €40	9 77	9 €1·60	9 10
10 9	10 20c	10 30c	10 €27	10 €54

Test 111	Test 112	Test 113	Test 114	Test 115
1 95 mins	1 66	1 20	1 4	1 218
2 €1·25	2 5	2 54	2 $\frac{3}{8}$	2 88
3 25	3 40	3 6	3 (c)	3 9
4 450g	4 28·9	4 130	4 9	4 601
5 8	5 69c	5 (b)	5 18	5 660
6 81	6 10	6 456	6 32	6 40
7 96	7 700g	7 15	7 $\frac{7}{10}$	7 9 R 2
8 12	8 8	8 325	8 $\frac{1}{4}$	8 $\frac{7}{10}$
9 47	9 10 R 2	9 377	9 15c	9 0·3
10 40c	10 €12	10 56	10 550g	10 17

Test 116
1 (c)
2 8
3 2m 46cm
4 49c
5 6
6 55
7 399
8 56c
9 $\frac{3}{8}$
10 85 mins