



3rd TAMILNADU STATE LEVEL ALAMA ABACUS COMPETITION

MENTAL ARITHMETIC - LEVEL-1

1 3 1 -4 	2 1 1 5 	3 3 5 -3 	4 3 -2 5 	5 1 2 -3 	6 4 5 -7 	7 7 -2 4
8 5 3 -6 5 	9 4 5 -2 -2 	10 7 2 -5 -2 	11 2 7 -4 -3 	12 8 -5 5 -7 	13 1 5 3 -4 	14 9 -8 7 -1
15 8 -6 -1 3 -1 	16 6 3 -3 -1 2 	17 5 3 -6 2 -3 	18 1 3 5 -4 -5 	19 1 5 1 -2 	20 2 2 -1 3 	21 1 1 -2 5
22 64 -3 -1 	23 39 -5 -3 	24 15 -5 4 	25 44 -3 -1 	26 23 -2 51 	27 19 -6 1 	28 8 -2 60
29 2 7 -6 33 	30 38 -25 4 50 	31 7 -2 22 10 	32 43 4 1 -33 	33 46 -2 3 -11 	34 25 -10 -2 3 	35 23 4 -10 5



3rd TAMILNADU STATE LEVEL ALAMA ABACUS COMPETITION

MENTAL ARITHMETIC - LEVEL-1

36 17 8 29 1 	37 27 -3 10 13 	38 5 -3 28 17 	39 9 19 18 8 	40 26 8 18 -10 	41 46 1 -2 20 	42 2 2 24 -11
43 10 44 10 	44 30 -30 10 	45 10 13 -10 	46 30 26 -12 	47 20 16 -11 	48 20 14 -10 	49 20 51 -40
50 15 22 -21 -10 	51 19 18 -20 11 	52 15 12 17 -30 	53 36 27 -60 15 	54 20 26 50 -30 	55 15 12 -17 30 	56 27 -13 18 -10
57 18 13 55 -51 	58 32 12 14 10 	59 10 16 -12 51 	60 10 36 -12 10 	61 21 11 10 -11 	62 54 20 -10 20 	63 68 15 -20 13
64 16 26 21 -20 	65 37 -22 10 -10 	66 27 36 -62 20 	67 20 20 10 16 	68 22 46 -14 -52 	69 83 -42 15 -22 	70 13 12 -24 17
71 13 12 -15 14 	72 10 40 20 -10 	73 17 -15 13 -15 	74 23 -21 20 50 	75 46 -25 20 -10 		



3rd TAMILNADU STATE LEVEL ALAMA ABACUS COMPETITION
MENTAL ARITHMETIC - LEVEL-2

1	2 3 1	2	2 2 1	3	1 4 2	4	5 -3 4	5	4 -4 2	6	1 2 -3	7	2 3 -4
8	5 -1 -1 2	9	8 4 -2 3	10	5 2 -3 1	11	1 2 -3 2	12	4 -1 4 2	13	3 2 1 -1	14	4 3 2 -1
15	5 2 -6 1	16	1 4 -5 6	17	4 -2 2 -1	18	3 5 -2 3	19	5 4 -9 3	20	4 2 -5 6	21	3 -2 3 6
22	32 3 3 1	23	84 -1 2 3	24	34 2 3 2	25	3 22 2 2	26	33 1 4 -6	27	32 -1 4 5	28	45 2 3 -5
29	16 -3 2 4	30	13 1 1 2	31	14 4 2 5	32	17 -4 2 10	33	12 3 -2 -3	34	22 2 -2 3	35	32 3 -5 8



3rd TAMILNADU STATE LEVEL ALAMA ABACUS COMPETITION
MENTAL ARITHMETIC - LEVEL-2

36	12 2 13 -15	37	22 13 3 -5	38	23 1 -2 8	39	19 -4 13 -2	40	14 15 -4 3	41	22 5 -5 -1	42	48 -8 -3 -2
43	53 -19 15 25	44	42 13 -12 11	45	25 33 -12 11	46	19 -18 13 15	47	33 22 11 -14	48	25 13 -16 12	49	44 55 -11 -77
50	12 23 -12 11	51	15 23 -13 10	52	44 14 -50 21	53	24 -12 13 11	54	42 -11 -12 40	55	55 -11 -12 20	56	32 14 -12 20
57	41 34 -11 20	58	18 -16 14 30	59	28 -17 13 31	60	33 11 -21 22	61	13 23 33 -17	62	21 24 13 -16	63	28 -15 25 -12
64	43 × 2 =	68	37 × 3 =	72	37 × 1 =								
65	27 × 2 =	69	40 × 5 =	73	29 × 8 =								
66	62 × 3 =	70	21 × 6 =	74	29 × 7 =								
67	81 × 5 =	71	22 × 5 =	75	26 × 5 =								

MENTAL ARITHMETIC - LEVEL-3

1 $\begin{array}{r} 36 \\ 8 \\ -4 \\ 1 \end{array}$ 2 $\begin{array}{r} 9 \\ 5 \\ -3 \\ 23 \end{array}$ 3 $\begin{array}{r} 8 \\ -3 \\ 16 \\ -3 \end{array}$ 4 $\begin{array}{r} 23 \\ 5 \\ -3 \\ -6 \end{array}$ 5 $\begin{array}{r} 40 \\ -6 \\ 7 \\ 3 \end{array}$ 6 $\begin{array}{r} 63 \\ -9 \\ 9 \\ 1 \end{array}$ 7 $\begin{array}{r} 28 \\ -9 \\ 4 \\ 5 \end{array}$

8 $\begin{array}{r} 47 \\ 6 \\ -3 \\ 4 \end{array}$ 9 $\begin{array}{r} 55 \\ 5 \\ -9 \\ -1 \end{array}$ 10 $\begin{array}{r} 30 \\ 3 \\ -7 \\ -2 \end{array}$ 11 $\begin{array}{r} 11 \\ 9 \\ -6 \\ 7 \end{array}$ 12 $\begin{array}{r} 40 \\ 6 \\ -1 \\ 14 \end{array}$ 13 $\begin{array}{r} 16 \\ 6 \\ 1 \\ -6 \end{array}$ 14 $\begin{array}{r} 4 \\ 13 \\ 8 \\ 32 \end{array}$

15 $\begin{array}{r} 12 \\ 8 \\ -8 \\ 7 \end{array}$ 16 $\begin{array}{r} 25 \\ -9 \\ -2 \\ -12 \end{array}$ 17 $\begin{array}{r} 6 \\ -2 \\ 13 \\ 17 \end{array}$ 18 $\begin{array}{r} 41 \\ -7 \\ -2 \\ 9 \end{array}$ 19 $\begin{array}{r} 6 \\ 4 \\ 15 \\ -3 \end{array}$ 20 $\begin{array}{r} 2 \\ 67 \\ -9 \\ -42 \end{array}$ 21 $\begin{array}{r} 25 \\ 8 \\ -9 \\ 2 \end{array}$

22 $\begin{array}{r} 22 \\ -19 \\ 46 \\ -32 \end{array}$ 23 $\begin{array}{r} 12 \\ 13 \\ -15 \\ 16 \end{array}$ 24 $\begin{array}{r} 56 \\ -30 \\ 25 \\ -18 \end{array}$ 25 $\begin{array}{r} 41 \\ -27 \\ 40 \\ -37 \end{array}$ 26 $\begin{array}{r} 60 \\ -47 \\ 76 \\ -37 \end{array}$ 27 $\begin{array}{r} 18 \\ 77 \\ -13 \\ 71 \end{array}$ 28 $\begin{array}{r} 55 \\ 17 \\ 14 \\ -33 \end{array}$

29 $\begin{array}{r} 61 \\ 81 \\ 41 \\ -28 \end{array}$ 30 $\begin{array}{r} 32 \\ 45 \\ -49 \\ 25 \end{array}$ 31 $\begin{array}{r} 18 \\ 26 \\ 60 \\ -49 \end{array}$ 32 $\begin{array}{r} 45 \\ 45 \\ 75 \\ -90 \end{array}$ 33 $\begin{array}{r} 17 \\ 16 \\ 82 \\ -10 \end{array}$ 34 $\begin{array}{r} 21 \\ -19 \\ 12 \\ 16 \end{array}$ 35 $\begin{array}{r} 63 \\ -18 \\ -23 \\ -10 \end{array}$

MENTAL ARITHMETIC - LEVEL-3

36 $\begin{array}{r} 25 \\ -9 \\ 9 \\ -4 \\ 28 \end{array}$ 37 $\begin{array}{r} 66 \\ -9 \\ -5 \\ 18 \\ 9 \end{array}$ 38 $\begin{array}{r} 24 \\ -9 \\ -2 \\ 34 \\ 4 \end{array}$ 39 $\begin{array}{r} 44 \\ -9 \\ 4 \\ -9 \\ 21 \end{array}$ 40 $\begin{array}{r} 43 \\ 2 \\ 9 \\ -13 \\ 8 \end{array}$ 41 $\begin{array}{r} 95 \\ -65 \\ 3 \\ 9 \\ -3 \end{array}$ 42 $\begin{array}{r} 9 \\ 5 \\ -7 \\ 13 \\ 23 \end{array}$

43 $\begin{array}{r} 4 \\ 25 \\ -7 \\ 30 \\ 1 \end{array}$ 44 $\begin{array}{r} 4 \\ 23 \\ 5 \\ 12 \\ 6 \end{array}$ 45 $\begin{array}{r} 22 \\ 3 \\ 4 \\ 12 \\ 6 \end{array}$ 46 $\begin{array}{r} 30 \\ -2 \\ 3 \\ 12 \\ 5 \end{array}$ 47 $\begin{array}{r} 83 \\ 5 \\ -14 \\ 3 \\ -2 \end{array}$ 48 $\begin{array}{r} 17 \\ 6 \\ 22 \\ -8 \\ 32 \end{array}$ 49 $\begin{array}{r} 66 \\ 2 \\ -9 \\ 34 \\ -8 \end{array}$

50 $444 - 111 =$
51 $120 - 100 =$
52 $304 + 105 =$
53 $777 - 555 =$
54 $111 + 222 =$

55 $523 - 512 =$
56 $223 + 125 =$
57 $105 + 340 =$
58 $419 - 219 =$
59 $319 - 315 =$

60 $46 \times 3 =$
61 $84 \times 5 =$
62 $77 \times 7 =$

63 $61 \times 6 =$
64 $48 \times 2 =$
65 $147 \times 2 =$
66 $122 \times 4 =$

67 $188 \times 5 =$
68 $146 \times 5 =$
69 $401 \times 3 =$

70 $52 \div 2 =$
71 $25 \div 5 =$
72 $40 \div 4 =$

73 $81 \div 9 =$
74 $65 \div 5 =$
75 $42 \div 6 =$

MENTAL ARITHMETIC - LEVEL-4

1 26 54 -7 -37 6	2 8 64 -59 -6 86	3 88 8 -9 -67 37	4 93 -42 3 -4 9	5 45 3 1 -4 -17	6 4 75 -25 -2 8	7 7 74 -72 38 16
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8 89 17 -5 -1 27	9 83 -18 -7 6 -5	10 8 86 -9 -67 2	11 63 -4 44 -67 8	12 70 -54 57 -6 5	13 46 28 -46 2 -8	14 13 69 7 -8 3
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15 16 12 14 -11	16 55 17 -11 -60	17 13 84 -34 32	18 21 41 -13 16	19 20 52 -43 18	20 49 -11 -37 22	21 71 -46 56 -13
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22 23 48 -16 -33 81	23 63 -26 27 -25 11	24 32 -15 16 -17 23	25 27 13 53 -32 -10	26 95 -46 -37 17 46	27 44 44 -39 14 -22	28 26 18 -15 31 -16
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29 461 312	30 371 -251	31 778 -223	32 675 -425	33 937 -625	34 330 520	35 105 340
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MENTAL ARITHMETIC - LEVEL-4

36 147 -125 311	37 356 298 -567	38 670 148 105	39 322 212 101	40 876 -282 234	41 244 -212 110	42 324 -121 -111
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43	400 x 5 =	
44	721 x 1 =	
45	126 x 8 =	
46	213 x 6 =	
47	219 x 5 =	

48	1024 x 2 =	
49	2108 x 4 =	
50	1680 x 3 =	
51	1214 x 2 =	
52	1223 x 7 =	

53	62 x 12 =	
54	35 x 31 =	
55	56 x 21 =	
56	16 x 53 =	
57	60 x 15 =	

58	928 ÷ 2 =	
59	478 ÷ 3 =	
60	105 ÷ 5 =	
61	255 ÷ 5 =	
62	824 ÷ 4 =	

63	182 ÷ 26 =	
64	236 ÷ 59 =	
65	248 ÷ 37 =	
66	252 ÷ 42 =	
67	704 ÷ 88 =	
68	693 ÷ 99 =	
69	280 ÷ 56 =	

70	225 ÷ 25 =	
71	405 ÷ 45 =	
72	342 ÷ 38 =	
73	351 ÷ 39 =	
74	336 ÷ 48 =	
75	168 ÷ 28 =	

MENTAL ARITHMETIC - LEVEL-5

1 7
2
2
-1
1
4

2 8
3
1
-7
5
4

3 9
-7
8
5
1
7

4 3
1
2
6
4
2

5 9
1
-3
-3
2
4

6 9
8
-2
6
-3
-1

7 8
2
-6
2
6
-8

8	9	10	11	12	13	14
6	27	12	58	7	8	46
48	-7	46	-4	-5	55	7
48	28	-12	16	63	21	65
-36	16	-10	-1	29	6	-28
10	-20	8	25	-69	9	-43

15	16	17	18	19	20	21
23	91	56	57	54	42	28
18	-41	-15	-36	-18	-25	53
-15	50	54	76	33	83	-37
-11	-55	-12	-69	12	-66	-36

22

221
114

23

211
132

24

366
-152

25

867
-315

26

423
-412

27

838
-512

28

123
223

[illegible]

MENTAL ARITHMETIC - LEVEL-5

36	$22 \times 19 =$	
37	$28 \times 48 =$	
38	$18 \times 26 =$	
39	$11 \times 34 =$	
40	$33 \times 23 =$	

41	$1001 \times 3 =$	
42	$2111 \times 4 =$	
43	$1320 \times 3 =$	
44	$3112 \times 5 =$	
45	$1102 \times 2 =$	

46	$735 \div 7 =$	
47	$115 \div 5 =$	
48	$526 \div 2 =$	
49	$712 \div 3 =$	
50	$888 \div 4 =$	

51	$2176 \div 2 =$	
52	$4878 \div 6 =$	
53	$2718 \div 4 =$	
54	$9705 \div 5 =$	
55	$3246 \div 3 =$	

56	$388 \div 97 =$	
57	$444 \div 74 =$	
58	$342 \div 38 =$	
59	$448 \div 56 =$	
60	$368 \div 46 =$	

61	$\sqrt{361}$	=	
62	$\sqrt{144}$	=	
63	$\sqrt{4225}$	=	
64	$\sqrt{2025}$	=	
65	$\sqrt{2704}$	=	

Write 27 counts :

27

MENTAL ARITHMETIC - LEVEL-6

1
6
9
-1
-1
1
1
2

2
6
7
8
9
5
-4
-3
-1

3
7
6
6
-5
4
-5
4
-3

4
6
1
8
-1
-1
4
1
-2

5
9
2
8
4
3
-7
-5
-4

6
4
6
7
8
3
3
2
4

7
2
6
-1
-1
7
9
4
-8

8	9	10	11	12	13	14
64	75	56	34	22	54	27
6	-19	8	28	33	2	3
8	6	48	2	74	24	7
-14	8	-8	6	-6	6	-4
-4	-8	67	5	-4	-32	34
98	-29	-1	-12	7	8	89

15	16	17	18	19	20	21
52	15	75	25	13	50	72
74	20	81	18	10	-41	-67
-45	15	16	-10	35	44	50
34	-24	45	12	41	-40	-40
-18	12	-21	-20	-20	19	14

[illegible]

MENTAL ARITHMETIC - LEVEL-6

29

1111
2222

30

4444
5555

31

1222
-1111

32

2441
-1200

33

2345
-2120

34

5214
-5101

35

2216
-1210

36	1245	$\times 2 =$	
37	2019	$\times 3 =$	
38	1722	$\times 2 =$	
39	5111	$\times 4 =$	
40	3452	$\times 6 =$	

46	$124 \times 12 =$	
47	$142 \times 18 =$	
48	$223 \times 15 =$	
49	$174 \times 12 =$	
50	$162 \times 13 =$	

56	$108 \div 27 =$	
57	$540 \div 60 =$	
58	$364 \div 91 =$	
59	$988 \div 38 =$	
60	$144 \div 12 =$	

41	$26 \times 16 =$	
42	$12 \times 49 =$	
43	$28 \times 46 =$	
44	$62 \times 25 =$	
45	$27 \times 17 =$	

51	$850 \div 1 =$	
52	$136 \div 8 =$	
53	$453 \div 6 =$	
54	$410 \div 2 =$	
55	$197 \div 9 =$	

61	$\sqrt{16} + \sqrt{64} =$	
62	$\sqrt{81} + \sqrt{100} =$	
63	$\sqrt{4} + \sqrt{9} =$	
64	$\sqrt{4624} =$	
65	$\sqrt{3025} =$	

Write 54 counts :

54