



Global Mental Math Olympiad 2023

Practice Sheet 3-Answer Key

Zen Master Category

Section 1

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$15 + 9 - 7 = \underline{\quad}$	12	17	22	16
2	$24 + 8 - 4 = \underline{\quad}$	31	35	28	37
3	$24 + 7 - 1 = \underline{\quad}$	30	20	35	25
4	$51 + 3 - 1 = \underline{\quad}$	61	56	53	57
5	$68 + 5 - 1 = \underline{\quad}$	62	74	69	72
6	$16 - 9 - 1 = \underline{\quad}$	14	6	13	11
7	$15 - 4 - 3 = \underline{\quad}$	8	4	5	14
8	$12 - 2 - 1 = \underline{\quad}$	3	9	2	16
9	$25 - 8 - 1 = \underline{\quad}$	21	16	17	7
10	$35 - 7 - 3 = \underline{\quad}$	18	25	34	23

Section 2

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$39 + 55 = \underline{\quad}$	94	100	92	103
2	$26 + 74 = \underline{\quad}$	109	93	100	97
3	$91 + 42 = \underline{\quad}$	139	137	133	130
4	$87 + 48 = \underline{\quad}$	138	135	139	130
5	$92 + 73 = \underline{\quad}$	166	172	165	158



Section 3

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$41 + 34 - 31 = _$	44	37	43	41
2	$76 + 32 - 27 = _$	83	81	88	82
3	$79 + 55 - 43 = _$	85	101	91	95
4	$73 + 45 - 14 = _$	108	104	112	100
5	$99 + 75 - 51 = _$	123	124	131	120
6	$36 - 35 - 1 = _$	72	70	0	2
7	$94 - 68 - 25 = _$	1	2	3	11
8	$85 - 80 - 3 = _$	2	0	7	1
9	$92 - 41 - 12 = _$	39	41	35	33
10	$82 - 13 - 10 = _$	59	50	52	68

Section 4

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Double of 17 + Half of 80 = $_$	72	77	74	75
2	Double of 26 + Half of 82 = $_$	87	99	93	94
3	Double of 54 + Half of 66 = $_$	139	141	151	136
4	Double of 84 + Half of 46 = $_$	187	190	185	191
5	Double of 82 + Half of 76 = $_$	197	202	205	192
6	Double of 25 = $_$	58	52	50	55
7	Double of 38 = $_$	83	81	70	76
8	Double of 63 = $_$	116	127	134	126
9	Double of 68 = $_$	142	136	143	128
10	Double of 95 = $_$	194	190	183	182



Section 5

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Half of 206 = _	108	102	103	106
2	Half of 226 = _	107	105	120	113
3	Half of 374 = _	177	180	185	187
4	Half of 746 = _	368	373	383	367
5	Half of 830 = _	415	422	418	407
6	Double of 289 = _	571	572	580	578
7	Double of 641 = _	1273	1282	1279	1274
8	Double of 788 = _	1571	1576	1569	1570
9	Double of 884 = _	1769	1775	1773	1768
10	Double of 906 = _	1812	1803	1809	1815

Section 6

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Double of 36 + Half of 102 = _	122	124	123	127
2	Double of 28 + Half of 140 = _	126	122	127	129
3	Double of 31 + Half of 174 = _	145	143	149	152
4	Double of 67 + Half of 134 = _	192	209	201	200
5	Double of 92 + Half of 144 = _	256	266	261	253
6	Double of 67 + Double of 15 = _	170	172	154	164
7	Double of 81 + Double of 33 = _	231	228	229	238
8	Double of 55 + Double of 77 = _	261	255	264	258
9	Double of 80 + Double of 64 = _	288	290	281	286
10	Double of 61 + Double of 97 = _	313	326	316	310

Section 7

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Triple of 17 = _	61	48	59	51
2	Triple of 71 = _	212	223	210	213
3	Triple of 73 = _	227	214	219	209
4	Triple of 76 = _	232	228	225	238
5	Triple of 79 = _	229	237	238	234



Section 8

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Triple of 260 = _	771	774	785	780
2	Triple of 502 = _	1504	1506	1496	1513
3	Triple of 546 = _	1647	1635	1641	1638
4	Triple of 599 = _	1799	1794	1791	1797
5	Triple of 622 = _	1866	1876	1862	1863

Section 9

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	29, 62, 38 Mean = _	47	44	35	43
2	74, 18, 43 Mean = _	45	55	48	41
3	54, 77, 25 Mean = _	52	53	45	48
4	65, 31, 78 Mean = _	50	59	66	58
5	19, 87, 83 Mean = _	63	56	60	57
6	75, 65, 52 Mean = _	73	57	65	64
7	92, 55, 90 Mean = _	80	74	79	81
8	17, 31, 58, 46, 23 Mean = _	28	27	42	35
9	27, 55, 29, 71, 23 Mean = _	47	39	41	32
10	23, 48, 97, 40, 12 Mean = _	45	50	49	44
11	43, 96, 25, 12, 59 Mean = _	50	55	51	47
12	43, 18, 46, 82, 56 Mean = _	49	44	43	59
13	22, 28, 52, 82, 71 Mean = _	50	43	52	51
14	32, 51, 64, 43, 85 Mean = _	65	55	64	54
15	Half of 5598 = _	2801	2797	2799	2803
16	Half of 6984 = _	3492	3496	3494	3500
17	Half of 9764 = _	4876	4885	4874	4882
18	Half of 3398 = _	1702	1696	1691	1699
19	Half of 5692 = _	2846	2855	2838	2850



Section 10

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Cost price = 183, Selling Price = 109 Loss = __	74	69	71	76
2	Cost price = 136, Selling Price = 211 Profit = __	76	84	75	81
3	Cost price = 345, Selling Price = 182 Loss = __	163	154	173	155
4	Cost price = 377, Selling Price = 611 Profit = __	226	234	224	231
5	Cost price = 462, Selling Price = 763 Profit = __	301	303	291	304
6	Cost price = 761, Selling Price = 1142 Profit = __	380	389	385	381
7	Cost price = 952, Selling Price = 466 Loss = __	492	485	486	483
8	Cost price = 130, Selling Price = 193 Profit = __	70	58	63	54
9	Cost price = 153, Selling Price = 41 Loss = __	109	112	111	102
10	Cost price = 304, Selling Price = 133 Loss = __	174	173	181	171
11	Cost price = 924, Selling Price = 1248 Profit = __	328	334	318	324
12	Cost price = 753, Selling Price = 421 Loss = __	327	330	332	325
13	Cost price = 574, Selling Price = 913 Profit = __	329	348	337	339
14	Cost price = 651, Selling Price = 1068 Profit = __	407	417	422	421

Section 11

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$3^2 = _$	7	9	3	18
2	$5^2 = _$	25	21	34	33
3	$6^2 = _$	38	36	28	26
4	$7^2 = _$	42	49	47	43
5	$9^2 = _$	90	81	73	80
6	$13^2 = _$	172	162	170	169
7	$19^2 = _$	367	361	358	365
8	$27^2 = _$	723	725	730	729
9	$46^2 = _$	2106	2119	2116	2114



10	$51^2 = \underline{\quad}$	2597	2601	2599	2610
11	$53^2 = \underline{\quad}$	2804	2802	2807	2809
12	$63^2 = \underline{\quad}$	3969	3964	3976	3973
13	$64^2 = \underline{\quad}$	4103	4096	4097	4099
14	$80^2 = \underline{\quad}$	6397	6390	6401	6400
15	$86^2 = \underline{\quad}$	7404	7387	7403	7396

Section 12

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$419 + 43 - 8 = \underline{\quad}$	448	446	456	454
2	$384 + 93 - 1 = \underline{\quad}$	482	484	471	476
3	$638 + 99 - 4 = \underline{\quad}$	742	738	733	739
4	$727 + 55 - 1 = \underline{\quad}$	781	782	775	790
5	$868 + 91 - 6 = \underline{\quad}$	953	944	956	947
6	$118 - 57 + 4 = \underline{\quad}$	68	58	74	65
7	$368 - 81 + 8 = \underline{\quad}$	295	301	296	285
8	$587 - 97 + 1 = \underline{\quad}$	492	490	491	488
9	$712 - 97 + 9 = \underline{\quad}$	621	625	630	624
10	$954 - 98 + 6 = \underline{\quad}$	871	864	858	862

Section 13

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$21 \times \underline{\quad} = 42$	2	12	8	4
2	$24 \times \underline{\quad} = 48$	11	2	12	1
3	$41 \times \underline{\quad} = 205$	10	2	5	15
4	$66 \times \underline{\quad} = 396$	16	10	12	6
5	$78 \times \underline{\quad} = 624$	5	17	6	8

Section 14

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$2 \times 6 \times 4 = \underline{\quad}$	42	48	40	44
2	$5 \times 2 \times 8 = \underline{\quad}$	74	73	85	80
3	$6 \times 3 \times 5 = \underline{\quad}$	100	95	81	90
4	$9 \times 3 \times 9 = \underline{\quad}$	237	253	243	241
5	$9 \times 7 \times 9 = \underline{\quad}$	575	569	567	565



Section 15

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$14 \times 73 = _$	1019	1012	1029	1022
2	$31 \times 41 = _$	1279	1267	1265	1271
3	$22 \times 59 = _$	1301	1307	1308	1298
4	$20 \times 69 = _$	1383	1380	1387	1386
5	$20 \times 72 = _$	1440	1442	1436	1443
6	$29 \times 59 = _$	1711	1713	1704	1717
7	$23 \times 84 = _$	1936	1932	1933	1939
8	$31 \times 96 = _$	2980	2975	2972	2976
9	$55 \times 77 = _$	4239	4235	4227	4236
10	$89 \times 73 = _$	6506	6505	6497	6494
11	$\sqrt{121} = _$	20	12	9	11
12	$\sqrt{225} = _$	17	15	10	21
13	$\sqrt{400} = _$	21	12	20	11
14	$\sqrt{576} = _$	16	26	24	27
15	$\sqrt{784} = _$	37	28	34	33
16	$\sqrt{1156} = _$	42	26	37	34
17	$\sqrt{2025} = _$	36	35	49	45
18	$\sqrt{2209} = _$	39	47	45	41
19	$\sqrt{2916} = _$	52	50	49	54
20	$\sqrt{5041} = _$	68	65	71	72
21	$\sqrt{5625} = _$	65	73	84	75
22	$\sqrt{6561} = _$	81	82	77	79
23	$\sqrt{7569} = _$	85	78	95	87
24	$\sqrt{8464} = _$	82	98	102	92
25	$\sqrt{9604} = _$	103	92	88	98

Section 16

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Cube Root of 17576 = $_$	24	36	26	27
2	Cube Root of 24389 = $_$	22	20	28	29
3	Cube Root of 27000 = $_$	30	33	29	34
4	Cube Root of 29791 = $_$	38	23	31	21
5	Cube Root of 32768 = $_$	32	35	39	36



6	Cube Root of 35937 = _	27	25	33	24
7	Cube Root of 46656 = _	28	39	34	36
8	Cube Root of 54872 = _	43	48	38	36
9	Cube Root of 85184 = _	48	47	44	49
10	Cube Root of 91125 = _	48	45	47	50

Section 17

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$299 + 93 = _$	392	382	388	398
2	$404 + 16 = _$	427	420	418	429
3	$528 + 57 = _$	588	585	593	582
4	$890 + 17 = _$	903	907	914	913
5	$960 + 84 = _$	1053	1039	1040	1044
6	$143 - 25 = _$	108	118	123	127
7	$385 - 84 = _$	294	297	301	292
8	$506 - 65 = _$	432	443	448	441
9	$706 - 74 = _$	641	636	632	626
10	$878 - 36 = _$	840	836	848	842

Section 18

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$545 + 166 = _$	701	712	711	703
2	$685 + 150 = _$	838	835	832	837
3	$381 + 487 = _$	874	869	861	868
4	$844 + 515 = _$	1364	1366	1359	1363
5	$650 + 989 = _$	1642	1633	1640	1639
6	$376 - 68 + 56 = _$	365	364	363	362
7	$535 - 93 + 25 = _$	467	469	475	465
8	$553 - 71 + 40 = _$	524	526	522	532
9	$792 - 50 + 45 = _$	794	787	782	785
10	$849 - 93 + 74 = _$	828	830	838	829
11	$422 + 72 - 47 = _$	440	447	452	450
12	$424 + 93 - 60 = _$	462	465	464	457
13	$518 + 93 - 62 = _$	552	551	549	542
14	$668 + 43 - 42 = _$	667	669	666	663
15	$652 + 75 - 17 = _$	710	709	703	702



Section 19

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$3868 - 686 = _$	3181	3184	3182	3189
2	$4144 - 596 = _$	3539	3547	3548	3550
3	$4204 - 349 = _$	3863	3848	3855	3852
4	$5497 - 453 = _$	5044	5035	5034	5041
5	$6259 - 155 = _$	6101	6108	6095	6104

Section 20

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$254 + 984 + 213 = _$	1451	1449	1450	1448
2	$309 + 401 + 757 = _$	1467	1461	1457	1476
3	$301 + 546 + 712 = _$	1569	1560	1559	1561
4	$785 + 432 + 412 = _$	1637	1635	1629	1620
5	$228 + 589 + 983 = _$	1798	1799	1806	1800

Section 21

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$(73 + 98) \times (13 + 19) = _$	5470	5475	5472	5473
2	$(89 + 21) \times (49 + 12) = _$	6711	6710	6700	6702
3	$(37 + 89) \times (92 + 89) = _$	22800	22807	22816	22806
4	$(53 + 94) \times (94 + 73) = _$	24550	24542	24549	24556
5	$(81 + 87) \times (68 + 97) = _$	27725	27720	27713	27711

Section 22

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Multiple of 44 = $_$	176, 220, 396	177, 221, 399	180, 182, 401	183, 227, 405
2	Multiple of 73 = $_$	222, 295, 514	224, 298, 515	219, 292, 511	228, 301, 519
3	Multiple of 14 = $_$	29, 86, 113	28, 84, 112	33, 88, 116	37, 93, 119
4	Multiple of 99 = $_$	297, 594, 792	300, 595, 794	301, 600, 796	304, 602, 800
5	Multiple of 22 = $_$	47, 68, 91	44, 66, 88	49, 72, 94	52, 75, 95



Section 23

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Find the LCM of 11 and 22 ?	17	12	14	22
2	Find the LCM of 25 and 26 ?	643	654	647	650
3	Find the LCM of 22 and 53 ?	1166	1163	1171	1176
4	Find the LCM of 26 and 92 ?	1206	1186	1201	1196
5	Find the LCM of 71 and 22 ?	1572	1570	1562	1571
6	Find the LCM of 73 and 25 ?	1818	1826	1825	1824
7	Find the LCM of 78 and 62 ?	2415	2418	2408	2413
8	Find the LCM of 49 and 65 ?	3191	3180	3185	3176
9	Find the LCM of 75 and 71 ?	5329	5328	5325	5333
10	Find the LCM of 83 and 81 ?	6728	6726	6731	6723

Section 24

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Find the HCF of 62, 77 = _	8	1	6	7
2	Find the HCF of 87, 91 = _	8	1	10	3
3	Find the HCF of 74, 20 = _	7	10	4	2
4	Find the HCF of 92, 90 = _	1	4	2	10
5	Find the HCF of 72, 87 = _	13	5	3	1
6	Find the HCF of 84, 20 = _	4	5	3	9
7	Find the HCF of 70, 95 = _	15	9	5	12
8	Find the HCF of 70, 49 = _	4	1	8	7
9	Find the HCF of 16, 24 = _	8	3	15	17
10	Find the HCF of 48, 36 = _	17	13	12	10

Section 25

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$553 \div 7 = _$	87	76	79	74
2	$801 \div 9 = _$	99	96	81	89
3	$188 \div 2 = _$	90	102	94	98
4	$784 \div 8 = _$	105	98	104	108
5	$495 \div 5 = _$	95	109	99	103



Section 26

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Remainder of $56 / 4 = \underline{\quad}$	2	1	0	3
2	Remainder of $99 / 4 = \underline{\quad}$	1	2	0	3
3	Remainder of $84 / 8 = \underline{\quad}$	7	6	4	1
4	Remainder of $13 / 7 = \underline{\quad}$	16	6	1	2
5	Remainder of $33 / 9 = \underline{\quad}$	7	3	8	6
6	Remainder of $409 / 27 = \underline{\quad}$	9	1	4	0
7	Remainder of $480 / 25 = \underline{\quad}$	15	8	0	5
8	Remainder of $601 / 49 = \underline{\quad}$	10	13	22	16
9	Remainder of $938 / 77 = \underline{\quad}$	14	21	8	5
10	Remainder of $377 / 45 = \underline{\quad}$	14	11	13	17
11	Remainder of $363 / 49 = \underline{\quad}$	29	20	15	14
12	Remainder of $982 / 53 = \underline{\quad}$	30	18	31	28
13	Remainder of $308 / 52 = \underline{\quad}$	56	55	48	49
14	Remainder of $263 / 70 = \underline{\quad}$	62	46	53	50
15	Remainder of $316 / 83 = \underline{\quad}$	59	75	67	73

Section 27

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	5% of 80 = $\underline{\quad}$	10	13	9	4
2	20% of 45 = $\underline{\quad}$	0	5	1	9
3	25% of 44 = $\underline{\quad}$	2	11	19	21
4	25% of 72 = $\underline{\quad}$	18	20	19	11
5	25% of 76 = $\underline{\quad}$	19	15	28	27
6	25% of 84 = $\underline{\quad}$	16	21	29	15
7	25% of 88 = $\underline{\quad}$	22	31	16	14
8	5% of 340 = $\underline{\quad}$	7	22	9	17
9	20% of 545 = $\underline{\quad}$	99	109	107	101
10	50% of 378 = $\underline{\quad}$	199	189	190	196
11	50% of 386 = $\underline{\quad}$	193	203	202	195
12	50% of 498 = $\underline{\quad}$	249	255	250	254
13	46% of 650 = $\underline{\quad}$	299	290	309	293
14	50% of 846 = $\underline{\quad}$	418	416	423	422
15	59% of 900 = $\underline{\quad}$	539	531	533	527



Section 28

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	Prime Factors of 34 = _	3, 18	2, 17	6, 23	9, 24
2	Prime Factors of 88 = _	3, 5, 12	2, 2, 2, 11	6, 7, 8, 15	10, 11, 19
3	Prime Factors of 56 = _	4, 8	7, 8, 11	9, 10, 14	2, 2, 2, 7
4	Prime Factors of 82 = _	4, 43	6, 47	11, 48	2, 41
5	Prime Factors of 341 = _	13, 33	15, 35	20, 38	11, 31
6	Prime Factors of 560 = _	3, 4, 5, 6, 9	2, 2, 2, 2, 5, 7	6, 7, 8, 10, 12	9, 11, 14
7	Prime Factors of 620 = _	2, 2, 5, 31	3, 7, 32	7, 11, 37	9, 10, 14, 38
8	Prime Factors of 500 = _	10, 11, 12, 14	4, 5, 6, 7, 8	7, 8, 9, 10, 11	2, 2, 5, 5, 5
9	Prime Factors of 332 = _	10, 11, 90	5, 84	8, 88	2, 2, 83
10	Prime Factors of 478 = _	10, 246	5, 242	8, 244	2, 239
11	Prime Factors of 114 = _	2, 3, 19	3, 4, 20	6, 8, 23	11, 12, 28
12	Prime Factors of 322 = _	5, 10, 24	2, 7, 23	7, 11, 29	11, 16, 32
13	Prime Factors of 393 = _	3, 131	5, 133	9, 136	12, 140
14	Prime Factors of 675 = _	3, 3, 3, 5, 5	4, 5, 6, 8	8, 9, 10	11, 12, 13

Section 29

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	77 : 721 = _	11:103	15:112	12:105	13:106
2	55 : 305 = _	11:61	13:64	19:63	14:65
3	14 : 679 = _	10:100	8:98	2:97	5:106
4	24 : 824 = _	3:103	12:112	5:104	7:106
5	35 : 469 = _	8:76	5:67	9:68	7:75
6	40 : 584 = _	8:75	9:75	5:73	14:78
7	49 : 721 = _	8:110	10:110	7:103	15:112
8	16 : 88 = _	8:13	2:11	5:15	4:12



9	$18 : 99 = \underline{\quad}$	6:13	8:13	11:19	2:11
10	$10 : 35 = \underline{\quad}$	11:13	6:14	2:7	8:15
11	$40 : 56 = \underline{\quad}$	12:8	5:7	10:14	7:14
12	$35 : 55 = \underline{\quad}$	12:20	9:13	8:20	7:11
13	$63 : 27 = \underline{\quad}$	10:4	7:3	11:10	14:6
14	$63 : 45 = \underline{\quad}$	9:14	7:5	16:7	9:10

Section 30

Sr.no	Question Content	Option 1	Option 2	Option 3	Option 4
1	$720 / 90 = \underline{\quad}$	1	8	6	7
2	$414 / 46 = \underline{\quad}$	9	7	6	14
3	$540 / 54 = \underline{\quad}$	0	10	9	5
4	$676 / 52 = \underline{\quad}$	17	7	3	13
5	$754 / 26 = \underline{\quad}$	31	21	29	33