



Global Mental Math Olympiad 2024

Practice Sheet 2

Grandmaster Category (Ages 12 & Above)

Section 1

Question Content	Option 1	Option 2	Option 3	Option 4
$77 + 5 - 4 = _$	72	78	84	79
$36 + 8 - 3 = _$	41	32	39	37
$88 + 5 - 5 = _$	95	97	92	88
$21 + 6 - 1 = _$	30	23	26	33
$98 + 9 - 1 = _$	106	97	105	108
$78 + 8 - 7 = _$	86	79	81	85
$48 + 9 - 9 = _$	49	48	52	55
$38 + 9 - 1 = _$	46	37	54	52
$96 + 8 - 5 = _$	100	101	99	98
$48 + 8 - 5 = _$	44	57	51	45
$82 - 9 - 8 = _$	67	65	59	69
$18 - 5 - 5 = _$	8	10	5	2
$19 - 8 - 2 = _$	14	9	16	1
$37 - 3 - 2 = _$	41	28	32	36
$64 - 5 - 3 = _$	64	47	55	56
$29 - 8 - 3 = _$	15	26	18	16
$64 - 9 - 4 = _$	46	52	50	51
$27 - 9 - 2 = _$	20	9	16	18
$70 - 4 - 1 = _$	61	63	65	62
$80 - 1 - 1 = _$	76	69	78	72

Section 2

Question Content	Option 1	Option 2	Option 3	Option 4
$85 + 80 = _$	163	156	174	165
$35 + 90 = _$	125	116	131	127
$96 + 16 = _$	103	112	118	108
$26 + 26 = _$	53	55	49	52
$88 + 24 = _$	109	117	112	105



$57 + 42 = \underline{\quad}$	99	95	103	90
$92 + 67 = \underline{\quad}$	151	153	157	159
$86 + 97 = \underline{\quad}$	191	181	177	183
$86 + 37 = \underline{\quad}$	131	126	123	117
$82 + 34 = \underline{\quad}$	111	118	116	125

Section 3

Question Content	Option 1	Option 2	Option 3	Option 4
$85 + 37 - 24 = \underline{\quad}$	96	93	107	98
$85 + 53 - 51 = \underline{\quad}$	90	95	88	87
$20 + 15 - 13 = \underline{\quad}$	18	23	26	22
$70 + 63 - 33 = \underline{\quad}$	106	105	100	98
$88 + 53 - 19 = \underline{\quad}$	125	129	130	122
$58 - 16 - 11 = \underline{\quad}$	23	33	34	31
$78 - 44 - 14 = \underline{\quad}$	15	29	20	21
$65 - 37 - 11 = \underline{\quad}$	12	14	18	17
$96 - 90 - 6 = \underline{\quad}$	2	5	1	0
$90 - 78 - 10 = \underline{\quad}$	3	8	2	4

Section 4

Question Content	Option 1	Option 2	Option 3	Option 4
Double of 23 + Half of 36 = $\underline{\quad}$	70	73	62	64
Double of 95 + Half of 50 = $\underline{\quad}$	209	219	214	215
Double of 48 + Half of 26 = $\underline{\quad}$	103	105	109	106
Double of 66 + Half of 36 = $\underline{\quad}$	150	146	152	144
Double of 56 + Half of 64 = $\underline{\quad}$	147	142	144	152
Double of 23 = $\underline{\quad}$	48	40	52	46
Double of 76 = $\underline{\quad}$	152	147	160	149
Double of 64 = $\underline{\quad}$	136	128	121	130
Double of 89 = $\underline{\quad}$	185	178	180	177
Double of 99 = $\underline{\quad}$	206	198	202	197
Half of 936 = $\underline{\quad}$	468	466	460	470
Half of 544 = $\underline{\quad}$	272	270	264	267
Half of 630 = $\underline{\quad}$	323	315	309	311
Half of 422 = $\underline{\quad}$	211	205	217	212
Half of 532 = $\underline{\quad}$	266	271	269	264



Double of 643 = _	1291	1277	1283	1286
Double of 196 = _	388	390	396	392
Double of 834 = _	1670	1671	1676	1668
Double of 607 = _	1216	1209	1214	1212
Double of 889 = _	1787	1776	1778	1785

Section 5

Question Content	Option 1	Option 2	Option 3	Option 4
Double of 97 + Half of 186 = _	295	289	287	282
Double of 65 + Half of 162 = _	217	208	211	202
Double of 86 + Half of 192 = _	265	276	268	275
Double of 40 + Half of 114 = _	146	137	134	135
Double of 21 + Half of 170 = _	131	124	134	127
Double of 18 + Double of 56 = _	149	139	148	151
Double of 37 + Double of 63 = _	192	200	203	206
Double of 74 + Double of 22 = _	201	192	184	186
Double of 67 + Double of 72 = _	280	274	278	271
Double of 67 + Double of 45 = _	222	224	226	218

Section 6

Question Content	Option 1	Option 2	Option 3	Option 4
Triple of 58 = _	174	175	169	168
Triple of 54 = _	162	156	166	167
Triple of 24 = _	75	66	69	72
Triple of 39 = _	122	117	111	120
Triple of 45 = _	131	135	137	132
Triple of 391 = _	1181	1164	1172	1173
Triple of 108 = _	316	315	324	320
Triple of 186 = _	558	563	552	559
Triple of 301 = _	895	903	910	894
Triple of 782 = _	2342	2346	2344	2339



Section 7

Question Content	Option 1	Option 2	Option 3	Option 4
96, 37, 56 Mean = _	56	65	63	67
73, 12, 71 Mean = _	54	52	50	60
10, 92, 45 Mean = _	47	49	56	42
74, 25, 69 Mean = _	61	50	62	56
71, 15, 49 Mean = _	43	45	40	44
86, 54, 45, 63, 27 Mean = _	56	64	55	62
52, 84, 87, 30, 17 Mean = _	62	52	54	58
97, 66, 17, 54, 61 Mean = _	60	59	64	50
87, 51, 86, 81, 35 Mean = _	75	68	73	76
89, 24, 38, 90, 49 Mean = _	60	58	63	53
85, 69, 27, 88, 71 Mean = _	66	62	68	77
86, 67, 91, 59, 17 Mean = _	61	64	62	57
16, 62, 88, 44, 90 Mean = _	60	56	69	65
93, 36, 76, 33, 62 Mean = _	60	51	69	55
12, 85, 50, 56, 42 Mean = _	54	49	47	45

Section 8

Question Content	Option 1	Option 2	Option 3	Option 4
Half of 4064 = _	2040	2028	2032	2029
Half of 4966 = _	2485	2475	2491	2483
Half of 9924 = _	4962	4957	4953	4954
Half of 9100 = _	4550	4545	4548	4541
Half of 3144 = _	1577	1570	1564	1572

Section 9

Question Content	Option 1	Option 2	Option 3	Option 4
Profit = 52, Selling Price = 168 Cost price = _	109	108	117	116
Profit = 107, Selling Price = 366 Cost price = _	250	255	262	259
Profit = 188, Selling Price = 571 Cost price = _	391	381	387	383
Profit = 589, Selling Price = 1467 Cost price = _	875	869	878	886



Profit = 674, Selling Price = 1597 Cost price = __	925	932	923	915
Cost price = 349, Selling Price = 108 Loss = __	243	239	241	232
Cost price = 901, Selling Price = 1415 Profit = __	511	514	508	506
Cost price = 709, Selling Price = 1135 Profit = __	420	423	434	426
Cost price = 457, Selling Price = 178 Loss = __	279	278	285	287
Cost price = 489, Selling Price = 210 Loss = __	279	285	284	270
Cost price = 297, Selling Price = 422 Profit = __	132	116	130	125
Cost price = 327, Selling Price = 537 Profit = __	211	203	208	210
Cost price = 751, Selling Price = 1210 Profit = __	457	459	468	464
Cost price = 968, Selling Price = 300 Loss = __	668	676	667	659
Cost price = 736, Selling Price = 1024 Profit = __	293	288	283	287

Section 10

Question Content	Option 1	Option 2	Option 3	Option 4
$4^2 = _$	16	12	19	13
$3^2 = _$	9	6	4	11
$7^2 = _$	43	49	42	47
$8^2 = _$	67	65	64	70
$6^2 = _$	36	28	39	43
$31^2 = _$	961	959	968	970
$98^2 = _$	9601	9599	9600	9604
$18^2 = _$	324	330	328	316
$67^2 = _$	4498	4482	4492	4489
$81^2 = _$	6561	6569	6566	6560
$23^2 = _$	529	534	538	523
$79^2 = _$	6241	6244	6243	6238
$22^2 = _$	490	482	479	484
$94^2 = _$	8836	8845	8842	8833
$95^2 = _$	9023	9025	9021	9020



Section 11

Question Content	Option 1	Option 2	Option 3	Option 4
$848 + 39 - 7 = \underline{\quad}$	878	881	886	880
$509 + 19 - 5 = \underline{\quad}$	519	517	523	525
$357 + 23 - 1 = \underline{\quad}$	381	379	377	382
$216 + 23 - 8 = \underline{\quad}$	231	227	225	240
$511 + 27 - 1 = \underline{\quad}$	546	537	535	544
$446 - 86 + 7 = \underline{\quad}$	359	365	373	367
$988 - 55 + 8 = \underline{\quad}$	947	941	937	943
$672 - 35 + 1 = \underline{\quad}$	642	641	638	643
$634 - 45 + 5 = \underline{\quad}$	585	595	594	588
$557 - 90 + 9 = \underline{\quad}$	485	476	474	483

Section 12

Question Content	Option 1	Option 2	Option 3	Option 4
$32 \times \underline{\quad} = 128$	11	3	2	4
$55 \times \underline{\quad} = 110$	2	9	5	8
$51 \times \underline{\quad} = 204$	6	5	7	4
$73 \times \underline{\quad} = 511$	3	7	5	13
$65 \times \underline{\quad} = 260$	6	3	7	4
$46 \times \underline{\quad} = 92$	6	2	4	11
$54 \times \underline{\quad} = 108$	7	2	4	8
$24 \times \underline{\quad} = 96$	11	7	4	8
$31 \times \underline{\quad} = 62$	2	4	8	3
$79 \times \underline{\quad} = 474$	5	15	8	6
$\underline{\quad} \times 100 = 6800$	63	69	70	68
$\underline{\quad} \times 100 = 3200$	28	30	40	32
$\underline{\quad} \times 100 = 8900$	88	89	96	94
$\underline{\quad} \times 100 = 5900$	55	66	59	54
$\underline{\quad} \times 100 = 2200$	27	15	22	19



Section 13

Question Content	Option 1	Option 2	Option 3	Option 4
$4 \times 4 \times 1 = _$	8	10	23	16
$4 \times 2 \times 2 = _$	15	16	20	24
$7 \times 5 \times 9 = _$	320	311	307	315
$3 \times 9 \times 5 = _$	133	144	135	134
$1 \times 7 \times 6 = _$	33	47	51	42
$7 \times 1 \times 8 = _$	58	49	63	56
$3 \times 3 \times 5 = _$	45	41	36	46
$6 \times 6 \times 2 = _$	64	65	71	72
$5 \times 2 \times 2 = _$	17	25	18	20
$7 \times 3 \times 2 = _$	48	49	42	47

Section 14

Question Content	Option 1	Option 2	Option 3	Option 4
$12 \times 27 = _$	315	333	321	324
$57 \times 74 = _$	4224	4218	4210	4212
$48 \times 39 = _$	1876	1866	1872	1879
$72 \times 81 = _$	5834	5830	5836	5832
$76 \times 50 = _$	3800	3808	3804	3795
$65 \times 69 = _$	4486	4485	4493	4476
$13 \times 85 = _$	1113	1105	1112	1107
$32 \times 28 = _$	897	905	891	896
$16 \times 23 = _$	367	368	369	370
$17 \times 37 = _$	638	636	635	629
$530 \times 641 = _$	339730	339726	339739	339728
$188 \times 495 = _$	93067	93060	93066	93059
$251 \times 105 = _$	26348	26361	26352	26355
$786 \times 748 = _$	587936	587927	587928	587937
$195 \times 859 = _$	167505	167502	167503	167499
$\sqrt{441} = _$	22	29	26	21
$\sqrt{361} = _$	25	19	17	11
$\sqrt{484} = _$	24	16	22	19
$\sqrt{121} = _$	3	2	6	11
$\sqrt{196} = _$	14	11	18	5
$\sqrt{289} = _$	12	15	26	17



$\sqrt{784} = _$	28	30	35	27
$\sqrt{529} = _$	21	27	25	23
$\sqrt{1681} = _$	34	39	44	41
$\sqrt{1936} = _$	51	37	44	42
$\sqrt{2209} = _$	44	47	49	45
$\sqrt{4489} = _$	75	67	60	72
$\sqrt{3136} = _$	58	63	64	56
$\sqrt{4356} = _$	66	71	67	60
$\sqrt{3025} = _$	52	63	55	47
$\sqrt{8464} = _$	89	92	95	101
$\sqrt{9409} = _$	93	90	94	97
$\sqrt{1764} = _$	42	35	34	39

Section 15

Question Content	Option 1	Option 2	Option 3	Option 4
Cube Root of 59319 = $_$	43	35	39	32
Cube Root of 32768 = $_$	32	29	26	34
Cube Root of 42875 = $_$	29	35	30	42
Cube Root of 10648 = $_$	15	22	16	24
Cube Root of 21952 = $_$	26	28	19	37
Cube Root of 68921 = $_$	41	37	39	36
Cube Root of 29791 = $_$	31	35	29	39
Cube Root of 15625 = $_$	20	25	23	28
Cube Root of 97336 = $_$	42	45	52	46

Section 16

Question Content	Option 1	Option 2	Option 3	Option 4
$651 + 33 = _$	686	684	682	688
$324 + 19 = _$	345	343	336	341
$638 + 73 = _$	710	709	711	714
$457 + 28 = _$	485	483	487	488
$939 + 48 = _$	993	987	981	988
$502 - 58 = _$	435	450	444	438
$460 - 76 = _$	386	378	383	384
$898 - 61 = _$	834	830	837	839
$807 - 94 = _$	713	722	710	707



$195 - 86 = \underline{\quad}$	107	111	109	112
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Section 17

Question Content	Option 1	Option 2	Option 3	Option 4
$308 - 47 + 25 = \underline{\quad}$	283	290	288	286
$764 - 77 + 72 = \underline{\quad}$	752	751	759	768
$335 - 25 + 14 = \underline{\quad}$	325	322	315	324
$284 - 70 + 27 = \underline{\quad}$	243	241	249	239
$905 - 74 + 64 = \underline{\quad}$	887	895	897	903
$360 + 58 - 20 = \underline{\quad}$	395	406	389	398
$354 + 45 - 29 = \underline{\quad}$	370	372	367	373
$583 + 67 - 58 = \underline{\quad}$	592	584	593	583
$665 + 32 - 28 = \underline{\quad}$	661	669	677	672
$616 + 59 - 24 = \underline{\quad}$	651	643	649	655

Section 18

Question Content	Option 1	Option 2	Option 3	Option 4
$(17 + 66) \times (23 + 41) = \underline{\quad}$	5320	5304	5312	5310
$(45 + 69) \times (77 + 30) = \underline{\quad}$	12195	12203	12201	12198
$(30 + 36) \times (96 + 71) = \underline{\quad}$	11019	11030	11015	11022
$(76 + 80) \times (32 + 40) = \underline{\quad}$	11241	11228	11230	11232
$(52 + 88) \times (44 + 81) = \underline{\quad}$	17500	17504	17505	17507

Section 19

Question Content	Option 1	Option 2	Option 3	Option 4
Multiple of 20 = $\underline{\quad}$	80, 100, 140	82, 102, 141	87, 108, 149	84, 105, 145
Multiple of 27 = $\underline{\quad}$	81, 135, 162	87, 141, 168	83, 136, 163	88, 143, 171
Multiple of 10 = $\underline{\quad}$	57, 58, 78	51, 53, 73	55, 56, 76	40, 50, 70
Multiple of 87 = $\underline{\quad}$	348, 522, 783	356, 529, 792	350, 523, 786	354, 526, 788
Multiple of 99 = $\underline{\quad}$	303, 600, 896	298, 596, 893	306, 602, 898	297, 594, 891



Section 20

Question Content	Option 1	Option 2	Option 3	Option 4
Find the LCM of 39 and 78 ?	78	87	73	86
Find the LCM of 36 and 85 ?	3053	3052	3060	3061
Find the LCM of 86 and 98 ?	4213	4215	4214	4218
Find the LCM of 41 and 97 ?	3977	3975	3984	3986
Find the LCM of 69 and 15 ?	346	338	345	336
Find the LCM of 49 and 17 ?	831	835	829	833
Find the LCM of 41 and 53 ?	2168	2167	2173	2179
Find the LCM of 82 and 86 ?	3535	3519	3523	3526
Find the LCM of 62 and 61 ?	3782	3790	3785	3783
Find the LCM of 33 and 46 ?	1511	1525	1517	1518
Find the LCM of 15 and 64 ?	955	957	969	960
Find the LCM of 24 and 32 ?	88	96	91	94
Find the LCM of 34 and 77 ?	2610	2620	2618	2619
Find the LCM of 58 and 62 ?	1798	1800	1791	1795
Find the LCM of 58 and 74 ?	2137	2146	2155	2147

Section 21

Question Content	Option 1	Option 2	Option 3	Option 4
Find the HCF of 42, 44 = _	2	1	4	8
Find the HCF of 56, 32 = _	14	7	12	8
Find the HCF of 72, 95 = _	1	6	5	2
Find the HCF of 81, 55 = _	5	3	1	6
Find the HCF of 68, 14 = _	3	2	6	5
Find the HCF of 99, 94 = _	1	9	8	3
Find the HCF of 58, 18 = _	9	1	3	2
Find the HCF of 64, 58 = _	4	2	10	6
Find the HCF of 74, 54 = _	2	9	8	6
Find the HCF of 49, 51 = _	7	10	3	1



Section 22

Question Content	Option 1	Option 2	Option 3	Option 4
$256 / 8$ Quotient = _	34	40	32	24
$603 / 9$ Quotient = _	68	73	67	76
$666 / 2$ Quotient = _	330	327	333	338
$217 / 7$ Quotient = _	39	32	23	31
$420 / 2$ Quotient = _	210	203	206	212
$168 / 56$ Quotient = _	3	5	12	7
$286 / 11$ Quotient = _	28	24	31	26
$340 / 20$ Quotient = _	15	14	18	17
$582 / 97$ Quotient = _	6	2	8	15
$134 / 67$ Quotient = _	2	5	4	1

Section 23

Question Content	Option 1	Option 2	Option 3	Option 4
Remainder of $46 / 3$ = _	8	1	4	10
Remainder of $77 / 6$ = _	2	5	4	7
Remainder of $55 / 3$ = _	1	3	7	10
Remainder of $86 / 6$ = _	6	3	2	4
Remainder of $94 / 2$ = _	0	6	1	4
Remainder of $185 / 58$ = _	9	11	18	17
Remainder of $618 / 40$ = _	15	16	18	20
Remainder of $704 / 74$ = _	45	47	38	42
Remainder of $344 / 56$ = _	13	5	8	12
Remainder of $674 / 43$ = _	32	29	33	25

Section 24

Question Content	Option 1	Option 2	Option 3	Option 4
5% of 20 = _	2	7	1	8
50% of 74 = _	39	42	37	38
10% of 30 = _	3	1	10	0
20% of 15 = _	7	3	5	6
25% of 68 = _	19	14	23	17
25% of 84 = _	21	30	20	24
25% of 48 = _	16	21	10	12



50% of 18 = _	11	12	9	4
8% of 425 = _	40	34	26	39
20% of 555 = _	110	104	114	111
25% of 456 = _	114	116	121	105

Section 25

Question Content	Option 1	Option 2	Option 3	Option 4
Prime Factors of 34 = _	8, 21	2, 17	3, 20	9, 25
Prime Factors of 42 = _	10, 12, 16	6, 9, 12	3, 6, 8	2, 3, 7
Prime Factors of 91 = _	7, 13	12, 19	15, 20	10, 14
Prime Factors of 55 = _	13, 19	5, 11	11, 17	6, 14
Prime Factors of 18 = _	4, 5, 6	6, 9	2, 3, 3	11, 12
Prime Factors of 460 = _	10, 11, 14, 30	6, 10, 27	2, 2, 5, 23	4, 7, 24
Prime Factors of 474 = _	2, 3, 79	3, 6, 80	10, 88	7, 84
Prime Factors of 519 = _	3, 173	9, 178	5, 174	10, 180
Prime Factors of 931 = _	7, 7, 19	12, 13, 23	9, 21	15, 16, 27
Prime Factors of 828 = _	7, 8, 29	2, 2, 3, 3, 23	3, 5, 6, 25	9, 10, 11, 32

Section 26

Question Content	Option 1	Option 2	Option 3	Option 4
56 : 584 = _	11:74	12:80	7:73	9:75
27 : 369 = _	3:41	5:50	7:50	10:43
27 : 603 = _	12:76	3:67	5:76	7:69
10 : 265 = _	4:59	11:61	4:62	2:53
21 : 469 = _	3:67	7:69	11:72	12:69
18 : 66 = _	3:11	5:15	6:13	9:13
24 : 56 = _	3:7	12:13	4:10	9:16
77 : 14 = _	11:2	13:10	19:10	13:7
66 : 12 = _	13:10	11:2	15:11	19:4
18 : 45 = _	6:12	6:6	2:5	8:9



Section 27

Question Content	Option 1	Option 2	Option 3	Option 4
$720 \times 3 = \underline{\quad}$	2152	2158	2169	2160
$650 \times 5 = \underline{\quad}$	3246	3250	3251	3249
$374 \times 7 = \underline{\quad}$	2614	2618	2617	2622
$927 \times 3 = \underline{\quad}$	2784	2781	2778	2788
$192 \times 7 = \underline{\quad}$	1338	1336	1344	1346

Section 28

Question Content	Option 1	Option 2	Option 3	Option 4
$3864 - 878 = \underline{\quad}$	2986	2982	2985	2993
$3107 - 534 = \underline{\quad}$	2573	2577	2566	2571
$2270 - 895 = \underline{\quad}$	1374	1376	1375	1383
$1075 - 457 = \underline{\quad}$	619	624	612	618
$5821 - 950 = \underline{\quad}$	4875	4871	4868	4872

Section 29

Question Content	Option 1	Option 2	Option 3	Option 4
$954 + 924 = \underline{\quad}$	1880	1870	1873	1878
$873 + 941 = \underline{\quad}$	1811	1814	1816	1805
$741 + 613 = \underline{\quad}$	1357	1355	1356	1354
$986 + 485 = \underline{\quad}$	1473	1469	1466	1471
$134 + 790 = \underline{\quad}$	916	924	915	917
$820 + 660 = \underline{\quad}$	1480	1488	1473	1478
$395 + 590 = \underline{\quad}$	991	979	992	985
$242 + 708 = \underline{\quad}$	957	950	952	944
$345 + 517 = \underline{\quad}$	854	864	865	862
$276 + 173 = \underline{\quad}$	449	450	448	457
$590 + 183 + 894 = \underline{\quad}$	1667	1676	1668	1665
$697 + 394 + 399 = \underline{\quad}$	1496	1484	1490	1494
$725 + 839 + 430 = \underline{\quad}$	1997	1985	1994	1992
$454 + 831 + 445 = \underline{\quad}$	1730	1727	1735	1736
$108 + 393 + 667 = \underline{\quad}$	1159	1169	1170	1168



Section 30

Question Content	Option 1	Option 2	Option 3	Option 4
$3.85 \times 10 = \underline{\quad}$	35.5	44.5	38.5	41.5
$9.35 \times 10 = \underline{\quad}$	95.5	93.5	94.5	91.5
$5.11 \times 10 = \underline{\quad}$	54.1	48.1	45.1	51.1
$6.84 \times 10 = \underline{\quad}$	64.4	65.4	67.4	68.4
$2.03 \times 10 = \underline{\quad}$	20.3	13.3	15.3	18.3
$257.89 \times 100 = \underline{\quad}$	25785	25783	25780	25789
$285.44 \times 100 = \underline{\quad}$	28538	28537	28540	28544
$309.17 \times 100 = \underline{\quad}$	30913	30915	30920	30917
$160.57 \times 100 = \underline{\quad}$	16051	16064	16057	16059
$511.09 \times 100 = \underline{\quad}$	51109	51112	51105	51103
$2.03 \times 100 = \underline{\quad}$	203	208	197	202
$7.28 \times 100 = \underline{\quad}$	733	728	726	731
$8.28 \times 100 = \underline{\quad}$	827	829	825	828
$5.25 \times 100 = \underline{\quad}$	525	526	527	516
$7.24 \times 100 = \underline{\quad}$	724	728	723	721