

**MMLA Mathematics Assessment Items  
Answer Key**

**Multiple Choice**

<b>Item No.</b>	<b>Correct Answer</b>	<b>GLCE</b>	<b>MEAP Code</b>
1	B	N.FL.05.04	core
2	D	N.FL.05.04	core
3	B	N.FL.05.05	core
4	D	N.FL.05.05	core
5	A	N.FL.05.05	core
6	D	N.FL.05.05	core
7	B	N.FL.05.05	core
8	D	N.FL.05.05	core
9	C	N.FL.05.05	core
10	A	N.FL.05.06	core
11	B	N.FL.05.06	core
12	B	N.FL.05.06	core
13	D	N.FL.05.06	core
14	B	N.FL.05.06	core
15	A	N.MR.05.07	fut
16	B	N.MR.05.07	fut
17	A	N.MR.05.07	fut
18	C	N.ME.05.12	fut
19	D	N.MR.05.13	fut
20	C	N.MR.05.13	fut
21	D	N.MR.05.13	fut
22	D	N.FL.05.14	fut
23	B	N.FL.05.14	fut
24	B	N.FL.05.14	fut
25	A	N.FL.05.14	fut

26	D	N.FL.05.14	fut
27	B	N.FL.05.14	fut
28	B	N.FL.05.14	fut
29	B	N.FL.05.14	fut
30	D	N.FL.05.14	fut
31	D	N.FL.05.14	fut
32	C	N.FL.05.18	core
33	D	N.FL.05.18	core
34	C	N.FL.05.20	core
35	C	N.FL.05.20	core
36	B	N.FL.05.20	core
37	A	N.FL.05.20	core
38	C	N.MR.05.21	fut
39	B	N.MR.05.21	fut
40	B	N.MR.05.21	fut
41	D	M.UN.05.01	fut
42	D	M.UN.05.03	ext
43	B	M.UN.05.04	core
44	D	M.UN.05.04	core
45	B	M.PS.05.05	core
46	C	M.PS.05.05	core
47	B	M.TE.05.06	core
48	B	M.TE.05.06	core
49	C	M.TE.05.06	core
50	D	M.TE.05.06	core
51	B	M.TE.05.06	core
52	D	M.TE.05.07	core
53	B	M.TE.05.07	core
54	D	M.TE.05.07	core
55	A	M.TE.05.07	core

56	C	M.TE.05.07	core
57	D	M.TE.05.08	NASL
58	D	M.TE.05.08	NASL
59	D	M.TE.05.10	fut
60	B	G.TR.05.01	ext
61	A	G.TR.05.01	ext
62	C	G.TR.05.01	ext
63	C	G.GS.05.02	core
64	B	G.GS.05.03	fut
65	A	G.GS.05.03	fut
66	A	G.GS.05.03	fut
67	C	G.GS.05.04	fut
68	C	G.GS.05.04	fut
69	D	G.GS.05.04	fut
70	B	G.GS.05.05	core
71	A	G.GS.05.05	core
72	B	G.GS.05.06	core
73	C	G.GS.05.06	core
74	D	G.GS.05.07	fut
75	C	G.GS.05.07	fut
76	A	G.GS.05.07	fut
77	A	G.GS.05.07	fut
78	D	G.GS.05.07	fut
79	A	D.RE.05.01	core
80	C	D.RE.05.01	core
81	A	D.RE.05.01	core
82	B	D.AN.05.03	core
83	A	D.AN.05.03	core
84	B	D.AN.05.03	core
85	C	D.AN.05.03	core

86	C	D.AN.05.03	core
87	C	D.AN.05.03	core
88	A	D.AN.05.04	fut
89	B	D.AN.05.04	fut
90	C	D.AN.05.04	fut
91	B	D.AN.05.04	fut
92	C	D.AN.05.04	fut

## Open Ended

Item No.	Correct Answer	GLCE	MEAP Code
1	Philip forgot to "shift" the second partial product to the left, to account for the fact that "3318" is really 3318 tens, or 33180.	N.FL.05.04	core
2	119,917	N.FL.05.04	core
3	The factor tree could show 27 divided into $9 \times 3$ , then $3 \times 3 \times 3$ . $27 = 3^3$ .	N.MR.05.07	cut
4	They ate $\frac{7}{12}$ of the pizza, so $\frac{5}{12}$ is left, or 5 slices. Students can figure this out	N.FL.05.20	core
5	1 cubic inch is smaller than 1 cubic foot. 1 cubic centimeter is smaller than 1 cubic meter.	M.UN.05.03	ext
6	Drawing should show the parallelogram taken apart into triangles and rectangles and rearranged into one or more rectangles. The area of each rectangle can be determined by the grid.	M.PS.05.05	core
7	One approach is to flip the triangle over to make a second congruent triangle, then slide it next to the first, along the AB side. This makes a parallelogram with base 5 and height 3	M.PS.05.05	core
8	The area of a rectangle is base times height (bh). A rectangle can be divided into two right triangles by drawing the diagonal. Each rectangle has a base of b and a height of h. Since each has an area $\frac{1}{2}$ of the rectangle, the area of the triangle is $\frac{1}{2}bh$ .	M.TE.05.06	core
9	$A = 10$ square units	M.TE.05.07	core
10	$\angle DOE =$ approximately $25^\circ$ , acute; $\angle COD =$ approximately $65^\circ$ , acute; $\angle BOE =$ approximately $145^\circ$ , obtuse; $\angle AOC =$ approximately $90^\circ$ , right.	G.GS.05.02	core
11	$A = 130^\circ$ , $B = 50^\circ$ , $C = 130^\circ$	G.GS.05.07	cut
12	Graph would usually show time along the horizontal axis and distance along the vertical axis, although if the axes are switched, it would still be correct if the data points are correct. The points should be connected with straight lines.	D.RE.05.02	core