

Pyramid: Rules

How to solve

- Multiplication and Division: Solve the problems from top to bottom. Each problem has one more digit than the one before.
- Sums: Start with the column on the left. Write its answer in the top box of the column to its right (1)–(6), and include it when you add up that column. Write the answer to the last column in "Answer (7)".

Playing the game

1. Form groups of 2 to 6 players, and give each player one Lv. 1 set.
2. Set a time limit (3 minutes is recommended), and everyone starts at the same time.
3. When time is up, check the answers and count how many are correct.
4. The player with the most correct answers moves up one Lv. in the next round. Everyone else plays the same Lv. again.
5. Play several rounds. The player at the highest Lv. at the end wins.

Variations

- Compare how many problems each player gets right in a row, starting from the first one. This builds accuracy.
- Score 2 points for each problem solved by mental calculation and 1 point for each solved on the abacus. This makes it mental calculation practice.

Soroban Technology Lab

Pyramid Lv. 5

Lv. 5-1

						(5)	(6)
						(4)	
						(3)	
						(2)	
						(1)	
8	61	253	1,472	31,548	520,981	7,948,503	2,854,673
3	23	812	8,301	75,289	-571,286	-8,635,179	-5,097,461
5	58	317	6,724	58,046	-943,752	4,329,180	3,470,215
7	98	806	2,940	82,790	695,410	-4,312,758	-2,906,857
9	54	520	5,126	41,386	375,029	5,769,041	9,481,026
6	49	761	8,960	87,631	168,475	-9,318,602	7,948,503
8	76	205	3,682	69,543	926,847	7,593,120	-8,635,179
5	20	389	6,305	46,890	-426,730	-8,640,915	4,329,180
3	14	594	9,256	58,104	613,978	9,563,407	-9,318,602
1	89	739	5,094	49,153	-159,843	2,194,853	7,593,120
9	97	876	4,781	25,610	-147,036	-3,678,294	-8,640,915
Answer (7)							

Pyramid Lv. 5

Lv. 5-2

						(5)	(6)
						(4)	
						(3)	
						(2)	
						(1)	
4	62	390	4,201	70,398	-207,841	-8,516,239	1,859,764
3	90	728	7,936	35,216	-856,410	-3,546,902	-5,260,341
9	17	351	8,462	17,850	-134,069	7,243,108	619,253
8	54	915	1,863	59,042	791,834	6,324,081	9,621,057
6	18	980	7,185	85,623	493,728	-2,170,346	7,098,524
8	36	532	9,130	40,579	978,216	-9,483,765	7,084,351
6	65	806	2,571	94,831	-107,586	-1,723,950	37,924
7	98	107	6,370	46,279	-246,509	9,682,470	619,253
3	70	672	5,724	79,501	625,081	4,781,639	9,621,057
2	47	163	2,058	70,462	602,379	-6,235,798	7,098,524
7	42	894	4,952	26,935	125,780	3,125,689	7,084,351
Answer (7)							

Pyramid Lv. 5

Lv. 5-3

						(5)	(6)
						(4)	
						(3)	
						(2)	
						(1)	
8	56	249	9,025	45,367	-107,954	2,750,194	2,048,631
9	91	154	8,497	26,518	952,143	3,275,948	-4,385,276
6	83	561	3,016	14,985	835,624	6,931,804	4,589,062
3	40	860	1,783	78,403	-456,370	7,860,451	6,139,752
8	72	743	1,620	72,104	620,859	-9,531,287	6,139,752
7	97	901	2,563	61,795	132,708	-9,180,536	-7,692,410
9	18	892	7,659	27,634	917,608	-2,947,853	2,750,194
3	24	425	4,207	45,760	769,138	-1,073,826	3,275,948
7	32	783	4,965	43,520	481,769	-1,064,572	6,931,804
3	49	476	1,358	89,350	-907,235	7,809,346	7,860,451
4	57	310	7,423	90,617	-875,340	5,413,280	7,860,451
Answer (7)							

Pyramid Lv. 5

Lv. 5-4

						(5)	(6)
						(4)	
						(3)	
						(2)	
						(1)	
4	43	183	6,914	52,460	-734,269	6,408,329	4,237,098
5	96	840	8,129	17,230	823,417	4,592,810	-5,816,749
3	70	918	5,374	59,374	-749,103	-1,370,452	3,184,260
1	92	902	7,695	78,956	925,043	5,674,903	6,981,537
8	15	654	1,436	67,014	986,071	-5,697,231	5,370,491
9	58	429	3,087	50,621	850,364	-1,395,762	6,981,537
5	14	715	5,643	25,698	391,650	2,750,843	5,370,491
8	27	375	5,108	69,708	-912,547	-6,582,174	6,981,537
7	34	738	4,093	63,912	-275,806	-2,803,975	5,370,491
1	36	463	7,518	35,869	-407,692	-5,829,603	6,981,537
6	60	527	8,201	34,201	-281,309	2,069,584	5,370,491
Answer (7)							

Answers Pyramid

Pyramid Lv. 5

	Lv. 5-1	Lv. 5-2	Lv. 5-3	Lv. 5-4
(1)	64	63	67	57
(2)	703	662	686	602
(3)	7,464	7,474	7,877	7,913
(4)	81,116	83,367	67,987	76,356
(5)	820,274	825,286	834,837	861,978
(6)	2,324,730	3,939,536	2,524,132	4,082,490
(7)	12,938,682	23,822,878	13,466,840	15,856,399