

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. 6

Lv. 6-1

						(5)	(6)
						(4)	
						(3)	
						(2)	
						(1)	
4	42	629	2,504	51,782	-418,753	-1,658,429	9,864,102
6	90	716	6,742	87,029	-356,420	-1,935,267	-7,092,356
9	63	290	3,098	74,135	145,038	6,509,823	-4,135,078
5	25	591	1,364	35,698	268,149	5,297,401	7,640,812
3	71	380	7,369	12,379	-309,627	-3,158,764	4,321,987
9	30	342	3,951	52,974	730,546	3,406,928	-1,658,429
3	69	278	6,405	61,237	-972,438	-6,170,584	-1,935,267
4	98	801	1,870	98,524	671,398	-5,379,260	6,509,823
3	56	537	4,257	60,249	341,967	8,795,013	5,297,401
9	41	426	6,120	63,509	824,619	5,240,379	-3,158,764
8	74	543	4,387	78,251	-759,812	9,568,174	3,406,928
5	53	315	8,510	94,087	-510,964	-6,389,750	-6,170,584
8	81	972	2,543	27,308	834,095	3,924,158	-5,379,260
Answer (7)							

Pyramid Lv. 6

Lv. 6-2

						(5)	(6)
						(4)	
						(3)	
						(2)	
						(1)	
9	18	907	5,047	53,764	-576,248	5,813,290	2,961,483
6	32	715	8,950	94,071	-720,931	-4,528,967	-4,327,598
8	96	540	3,824	96,231	647,329	-1,053,946	4,605,721
5	75	928	1,345	43,875	-127,650	6,402,537	-2,097,516
3	94	673	4,876	74,218	821,306	8,349,176	951,706
4	71	396	9,530	68,512	-915,874	-3,902,687	428,139
9	50	584	6,927	21,368	-839,051	-2,184,053	19,437
8	20	109	3,124	31,624	194,685	7,156,302	68,302
6	46	642	8,716	30,684	-962,745	6,089,731	10,895
8	59	163	7,902	25,891	860,274	-5,861,309	386,495
7	63	407	4,068	97,423	-380,742	2,450,863	53,764
2	87	830	7,189	45,198	619,584	3,184,579	8,950
7	83	685	6,073	95,860	573,024	6,279,810	5,047
Answer (7)							

Pyramid Lv. 6

Lv. 6-3

						(5)	(6)
						(4)	
						(3)	
						(2)	
						(1)	
3	35	593	1,603	76,082	-267,045	-8,304,279	3,792,560
6	42	205	5,739	65,392	937,520	1,935,742	-2,718,496
4	31	931	3,568	98,142	679,218	-3,856,214	-3,025,981
7	28	467	6,174	34,728	-193,405	1,475,628	8,261,507
6	76	270	8,915	53,971	582,071	-1,093,456	5,026,743
9	89	693	6,810	30,829	745,296	6,902,783	-8,304,279
4	54	650	5,390	71,403	325,417	2,891,075	1,935,742
3	60	825	4,769	14,968	-265,841	5,147,320	-3,856,214
2	16	348	2,354	85,016	630,514	-1,840,795	1,475,628
8	94	276	1,208	68,427	390,827	-8,156,904	-1,093,456
1	10	531	7,526	72,315	-482,937	5,379,264	6,902,783
2	38	942	3,026	93,601	547,630	-4,968,170	2,891,075
1	78	981	9,405	46,093	-816,492	3,015,867	5,147,320
Answer (7)							

Pyramid Lv. 6

Lv. 6-4

						(5)	(6)
						(4)	
						(3)	
						(2)	
						(1)	
3	32	937	4,518	13,265	-263,908	9,413,260	9,523,486
1	19	604	9,205	98,643	792,845	-1,964,508	8,634,701
2	67	201	9,346	40,295	369,501	2,413,859	-915,683
1	93	418	9,864	18,023	548,019	6,792,513	2,591,678
3	40	765	6,350	92,648	-417,856	8,192,056	73,980
2	78	382	9,173	69,123	608,321	-3,257,180	94,571
8	16	529	2,657	46,157	421,867	-7,589,034	80,536
5	65	316	1,427	14,867	-546,972	-1,408,962	13,265
2	24	590	3,841	17,054	-104,293	7,058,329	4,207
7	91	293	7,835	21,380	419,236	-6,354,872	8,163
9	52	674	4,190	74,859	-476,138	-1,638,240	94,571
7	86	561	6,704	62,103	935,741	1,867,240	80,536
8	74	642	7,912	20,479	281,376	-3,156,407	40,295
Answer (7)							

Answers Pyramid

Pyramid Lv. 6

	Lv. 6-1	Lv. 6-2	Lv. 6-3	Lv. 6-4
(1)	76	82	56	58
(2)	869	876	707	795
(3)	8,157	8,748	9,203	8,465
(4)	80,433	99,803	92,433	103,857
(5)	1,078,543	977,156	1,025,562	941,840
(6)	1,519,040	2,639,875	3,915,744	2,951,720
(7)	30,168,329	28,698,206	13,779,938	32,820,328