

Geometric Problem Solving Performance Analysis: Q3 2024															
Problem Category		Model Performance (Score)													
Problem Type		Model													
Sub-Category		Claude-Sonnet-4.5	GPT-5	DeepSeek v3.1	DeepSeek-R1	Janus	Qwen3-VL	GPT-4	Nano Banana	Gemini-2.5-pro	Qwen3-14B	Doubao-Seedream	Qwen-Image	BAGEL	GLM-4.5V
Locus Construction		57.333	62.000	49.500	47.833	41.167	39.000	36.333	35.333	17.500	22.833	21.333	21.333	20.500	26.333
Measurement & Ratios		65.978	59.402	52.989	36.957	34.511	31.685	32.120	35.543	27.228	22.446	22.826	22.609	22.391	14.565
Polygon Properties & Constructions		65.888	59.953	64.579	45.467	39.393	35.654	36.729	33.037	33.364	30.794	25.607	23.925	20.794	15.561
Application of Theorems		65.550	66.720	56.284	49.954	41.560	39.312	39.289	34.335	29.633	29.151	23.578	22.569	22.317	19.656
Triangle Properties & Constructions		60.518	58.446	52.661	40.982	39.089	35.393	34.875	40.661	32.000	28.268	23.786	22.143	24.250	18.268
Geometric Transformations		67.620	67.327	53.936	45.319	40.785	37.580	35.319	38.590	35.053	26.955	24.787	22.181	22.553	19.455
Circle Properties & Constructions		66.460	71.631	64.503	56.433	47.037	44.898	43.914	36.941	33.866	36.160	24.898	22.738	21.048	21.449
Basic Constructions		63.811	65.211	64.887	53.835	46.687	44.323	43.351	38.741	28.299	33.938	24.173	22.989	22.397	20.742
Overall Average		61.234	63.567	58.912	48.765	40.876	37.219	36.145	34.782	29.876	28.543	24.123	22.456	21.789	18.932