

Benchmark / Category	L4 Behemoth	Llama4 Maverick	Llama4 Scout	Llama 3.1 405B	Llama 3.3 70B	Gemini 2.5 Pro	Gemini 2.0 Pro	Gemini 2.0 Flash	Gemini 2.0 Flash-Lite	GPT-4.5	GPT-4o	Claude 3.7	Claude Sonnet 3.7	Grok 3 Beta	DeepSeek R1	DeepSeek v3.1	Gemma 3 (27B)	Mistral 3.1 (24B)	o3-mini
<i>Inference Cost (\$/1M tokens In/Out)</i>	–	\$0.19–0.49 <sup>a</sup>	–	–	–	–	–	\$0.17	–	–	\$4.38	–	–	–	\$0.48	–	–	–	–
<i>Reasoning &amp; Knowledge</i>																			
Humanity’s Last Exam (no tools)	–	–	–	–	–	18.8	–	–	–	6.4	–	8.9	–	–	8.6 <sup>b</sup>	–	–	–	14.0 <sup>b</sup>
MMLU Pro	<b>82.2</b>	<b>80.5</b>	74.3	73.4	<b>81.2</b>	–	79.1	77.6	71.6	–	–	–	–	–	–	68.9	67.5	66.8	–
<i>Science</i>																			
GPQA diamond (single, pass@1)	<b>73.7</b>	<b>69.8</b>	<b>57.2</b>	49.0	68.4	84.0	64.7	60.1	51.5	71.4	53.6	78.2	68.0	80.2	71.5	<b>90.0</b>	42.4	46.0	79.7
GPQA diamond (multiple)	–	–	–	–	–	–	–	–	–	–	–	<b>84.6</b>	–	–	–	–	–	–	–
<i>Mathematics</i>																			
AIME 2025 (single, pass@1)	–	–	–	–	86.5	–	–	–	–	–	–	49.5	–	77.3	70.0	–	–	–	86.7
AIME 2025 (multiple)	–	–	–	–	–	–	–	–	–	–	–	–	<b>93.3</b>	–	–	–	–	–	–
AIME 2024 (single, pass@1)	–	–	–	–	87.3	–	–	–	–	36.7	–	61.3	–	83.9	79.8	–	–	–	92.0
AIME 2024 (multiple)	–	–	–	–	–	–	–	–	–	–	–	–	<b>93.3</b>	–	–	–	–	–	–
MATH-500	<b>95.0</b>	–	–	–	–	–	91.8	–	–	–	–	–	82.2	–	–	–	–	–	–
<i>Code Generation / Coding</i>																			
LiveCodeBench v5 (single, pass@1)	–	–	–	–	<b>74.1</b>	–	–	–	–	–	–	–	70.4	–	–	–	–	–	–
LiveCodeBench v5 (multiple)	–	–	–	–	–	–	–	–	–	–	–	–	<b>79.4</b>	–	–	–	–	–	–
LiveCodeBench (10/24–02/25)	<b>49.4</b>	<b>43.4</b>	32.8	27.7	<b>45.8 / 49.2<sup>c</sup></b>	–	36.0	34.5	28.9	–	32.3	–	–	–	<b>33.3</b>	29.7	–	–	–
<i>Code Editing</i>																			
Aider Polyglot	–	–	–	–	60.4 <sup>d</sup>	74.0 / 68.6	–	–	–	44.9 <sup>d</sup>	–	64.9 <sup>d</sup>	–	–	56.9 <sup>d</sup>	–	–	–	–
<i>Agentic Coding</i>																			
SWE-bench verified	–	–	–	–	49.3	63.8	–	–	–	38.0	–	<b>70.3</b>	–	–	49.2	–	–	–	–
<i>Factuality</i>																			
SimpleQA	–	–	–	–	13.8	<b>52.9</b>	–	–	–	62.5	–	–	–	43.6	30.1	–	–	–	–
<i>Visual / Image Reasoning</i>																			
MMMU (single)	<b>76.1</b>	73.4	69.4	–	No MM <sup>e</sup>	<b>81.7</b>	72.7	71.7	68.6	74.4	69.1	75.0	71.8	–	76.0	No MM <sup>e</sup>	64.9	62.8	No MM <sup>e</sup>
MMMU (multiple)	–	–	–	–	–	–	–	–	–	–	–	–	<b>78.0</b>	–	–	–	–	–	–
MathVista	–	73.7	70.7	–	–	–	73.1	57.6	–	–	–	–	70.7	No MM <sup>e</sup>	No MM <sup>e</sup>	–	67.6	68.9	–
<i>Image Understanding</i>																			
Vibe-Eval (Reka)	–	–	–	–	–	69.4	–	–	–	–	–	–	No MM <sup>e</sup>	No MM <sup>e</sup>	–	–	–	–	No MM <sup>e</sup>
ChartQA	–	<b>90.0</b>	88.8	No MM <sup>e</sup>	–	–	88.3	73.0	–	–	–	85.7	–	–	–	No MM <sup>e</sup>	76.3	<b>86.2</b>	–
DocVQA (test)	–	<b>94.4</b>	<b>94.4</b>	No MM <sup>e</sup>	–	–	–	91.2	–	–	–	92.8	–	–	–	–	90.4	<b>94.1</b>	–
<i>Long Context</i>																			
MRCR (128k avg)	–	–	–	–	–	<b>94.5</b>	–	61.4	–	–	64.0	–	–	–	–	–	–	–	–
MRCR (1M pointwise)	–	–	–	–	–	<b>83.1</b>	–	–	–	–	–	–	–	–	–	–	–	–	–
MTOB (half book)	–	<b>54.0 / 46.4</b>	<b>42.2 / 36.6</b>	128k <sup>f</sup>	128k <sup>f</sup>	–	–	48.4 / 39.8	42.3 / 35.1	–	–	128k <sup>f</sup>	–	–	128k <sup>f</sup>	128k <sup>f</sup>	128k <sup>f</sup>	128k <sup>f</sup>	–
MTOB (full book)	–	<b>50.8 / 46.7</b>	<b>39.7 / 36.3</b>	–	–	–	–	45.5 / 39.6	35.1 / 30.0	–	–	128k <sup>f</sup>	–	–	128k <sup>f</sup>	–	–	–	–
<i>Multilingual Performance</i>																			
Global MMLU (Lite)	–	–	–	–	–	<b>89.8</b>	–	–	–	–	–	–	–	–	–	–	–	–	–
Multilingual MMLU	–	<b>84.6</b>	–	–	–	–	–	–	–	–	81.5	–	–	–	–	–	–	–	–
Multilingual MMLU (OpenAI)	<b>85.8</b>	–	–	–	–	–	–	–	–	85.1	–	–	–	–	–	–	–	–	–

<sup>a</sup> \$0.19/1Mtok (3:1 blended) estimated distributed inference cost (Llama 4 Maverick).

<sup>b</sup> Text problems only.

<sup>c</sup> DeepSeek v3.1 internal result (45.8) used as range unknown for LiveCodeBench (10/24–02/25).

<sup>d</sup> Diff performance (Aider Polyglot).

<sup>e</sup> No multimodal support reported/applicable. Abbreviated as 'No MM'.

<sup>f</sup> Context window limits reported result (typically 128k). Abbreviated as '128k'.

**General Notes:** Scores are self-reported by vendors unless otherwise specified. Bold text ( ) indicates the highest score *in the original source table* for that benchmark row, not necessarily the highest across this combined table. ‘pass@1’: Single attempt evaluation. ‘Multiple’: Evaluation using multiple attempts/voting. Gemini 2.5 Pro results used model ‘gemini-2.5-pro-exp-03-25’ with default sampling (pass@1). Llama 4 results (Maverick, Scout) are 0-shot, temp=0, averaged for high-variance benchmarks. Llama 4 Behemoth results are current best internal runs (preview model). Cost estimates for non-Llama models sourced from Artificial Analysis. Non-Gemini/non-Llama results represent the highest self-reported scores found in the source documents. Model names abbreviated in headers for space (L4 = Llama 4, L3.1 = Llama 3.1). ‘–’ indicates data not found in sources.

Sources: Google Gemini (<https://blog.google/technology/google-deepmind/gemini-model-thinking-updates-march-2025/#enhanced-reasoning>), Llama (<https://www.llama.com>), SAFE (<https://agi.safe.ai/>), Math Arena (<https://matharena.ai/>), LiveCodeBench (<https://livecodebench.github.io/>), Aider Leaderboard (<https://aider.chat/docs/leaderboards>).