# Math Breakthroughs, Google's Scale, and the Agent Benchmark Shift

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*By AI High Signal Digest • May 27, 2026*

Frontier models showed fresh scientific reasoning range, Google disclosed the scale of its Gemini distribution, and agentic coding competition moved closer to real-world workflows. This brief also covers new multimodal products, inference economics, and the latest policy signals.

### Top Stories

*Why it matters: today's biggest signals were about scientific reasoning, distribution scale, and the shift from chat models to full agent systems.*

- **Frontier models posted another meaningful math result.** Claude Mythos solved the decades-old Erdős unit distance problem, and one account said it found a cleaner proof than the known OpenAI approach while running air-gapped, with no internet access [1]. Sebastien Bubeck added that, with the right harness, both Mythos and GPT-5.5 can now reproduce the one-shot unit distance solution [2]. The broader takeaway from today's research discussion is that more capability is showing up through model-plus-harness design, not just new base models [3].
- **Google showed the scale of its Gemini footprint.** Google later clarified that Gemini now has 900M monthly active users in the Gemini app alone, excluding AI Overviews and other Gemini-powered surfaces [4]. One analysis of the company's recent disclosures also noted token processing rising from 480T last year to 3.2 quadrillion now, with TPUs central to serving AI at that scale [5].
- **Agentic coding is being measured more like real work.** DeepSWE launched as a benchmark meant to show where top models actually diverge

in day-to-day developer workflows, and GPT-5.5 was cited as #1 on it [6, 7]. Alibaba also shipped Qwen3.7-Max as a flagship for the Agent Era, with end-to-end coding, office workflows, 35-hour autonomy on a kernel task, and a #4 debut in Code Arena: Frontend [8, 9].

## Research & Innovation

*Why it matters: the most interesting research today focused on memory, biology, and inference efficiency.*

- **Language Models Need Sleep proposed a low-latency path for long-horizon agents.** The idea is to periodically consolidate recent context through offline recurrent passes, write the result into persistent fast weights, and clear the KV cache; gains rose with longer "sleep" on deeper reasoning tasks [10].
- **Carbon pushed open DNA modeling much closer to whole-genome scale.** The model is described as 275x faster than the previous state of the art at its size and can process the full human genome on a single GPU in under two days [11]. Its tokenizer splits DNA into 6-base chunks while preserving single-base resolution [11].
- **Shard targeted one of inference's costliest bottlenecks.** On Llama-3.1-8B, it reported 10x KV-cache compression with zero quality loss, including 11.2x at 32K context and near-zero LongBench delta versus FP16 [12].

## Products & Launches

*Why it matters: launches centered on easier content creation, more accessible open models, and higher-end image generation.*

- **Gemini Omni extended conversational editing to video.** Demonstrations showed users reshaping scenes, swapping objects, changing viewpoints, translating audio while keeping background music, and zooming into images while preserving character and physics consistency [13, 14, 15, 16].
- **Cohere open-sourced Command A+.** Cohere called it its most powerful LLM yet, optimized to run on minimal hardware, while co-founder Nick Frosst framed the release as part of a push toward more empowering AI access [17, 18].
- **Microsoft's MAI-Image-2.5 entered the top tier of text-to-image.** The model debuted at #3 on the Arena leaderboard with a score of 1,254, a 72-point gain over MAI-Image-2, and marked the first time a lab outside Google DeepMind and OpenAI entered the top five [19]. Public early access is live on Arena [20].

## Industry Moves

*Why it matters: capital is flowing into inference and authenticity tooling even as model pricing keeps collapsing.*

- **Baseten is reportedly raising at a sharply higher valuation.** The inference provider is said to be raising $1B at an $11B valuation after growing from $200M to $600M ARR in Q1 [21].
- **DeepMind expanded SynthID into a broader industry coalition.** It said SynthID has watermarked more than 100B pieces of content, is adding partners including OpenAI, ElevenLabs, and Kakao, and has already seen 50M+ Gemini verification checks, with Search and Chrome next [22, 23].
- **API price competition accelerated again.** Xiaomi said MiMo-V2.5 pricing is permanently reduced by up to 99%, with unified pricing across context lengths and token plans upgraded to 5–8x more usable tokens [24]. Another note said MiMo 2.5 Pro now matches DeepSeek V4 Pro pricing [25].

## Policy & Regulation

*Why it matters: governments are moving from general AI debate to concrete controls and review processes.*

- **China is restricting overseas travel for top AI professionals at private firms including Alibaba and DeepSeek** [26].
- **The FDA launched a pilot to review AI-generated evidence in drug submissions.** Over 200 AI-designed drugs are already in clinical trials worldwide, but none have FDA approval; the new pilot selects 10 companies for expedited review [27].

## Quick Takes

- Runway launched Project Luxo, saying AI-generated video has crossed the uncanny valley; one 10-minute film was made by a single person in under a month [28].
- Anthropic's new security-guidance plugin for Claude Code cut security-related PR comments by 30-40% in internal rollout and benchmarks [29, 30].
- Figure signed a commercial agreement with Catalyst Brands to deploy humanoid robots at scale, starting in Reno, Nevada [31].
- Google introduced Daily Brief, a personalized morning-digest agent designed to be a daily first stop [32].

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**Sources**


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