Multi-turn Reasoning

User

Orchestrator

| Reasoning | Tool Calling | Tool Response | Reasoning | Tool Calling | Tool Response | ... | Answer |

📚 What is Alon-Tarsi number?

📚 The Alon-Tarsi number of a graph

🟢 Estimate the upper bound of $AT(K_{n,n})$ ...

🟢 In $K_{n,n}$, Eulerian subgraphs are unions of even cycles, possibly...

Query:
What is the Alon-Tarsi number of $K_{1000,1000}$?

Preference:
I want to be **cost efficient** if possible.

Basic Tools 🔧

📚 Local Search 💰

🌐 Web Search 💰💰💰💰

𝑓x get_flight_status 💰

💻 Code Interpreter 💰

Specialized LLMs 🔬

Qwen2.5-Math-7B 💰

Qwen2.5-Math-72B 💰💰

Codestral-22B 💰

Query Writer 💰

Generalist LLMs 😎

GPT-5 💰💰💰

LN-Ultra-253B 💰💰

Claude Opus 4.1 💰💰💰

Qwen3-235B 💰💰💰

Reward
Outcome ✅
Efficiency ⏱️
Preference 💰

Reinforcement Learning 🔥