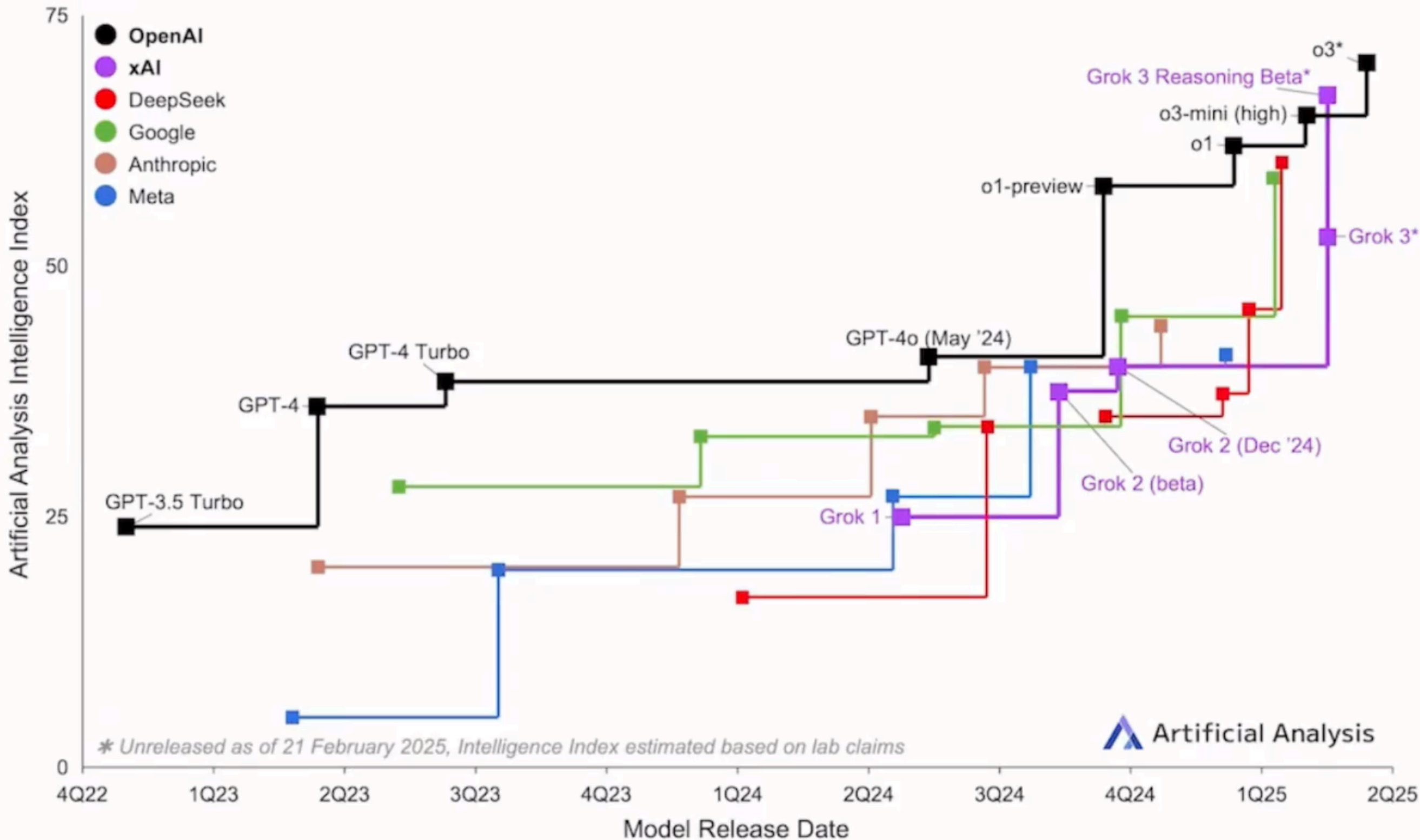# Frontier Model Intelligence Over Time by AI Lab

Artificial Analysis Intelligence Index includes MMLU Pro, GPQA Diamond, Humanity's Last Exam, LiveCodeBench, SciCode, MATH-500, AIME 2024
Intelligence Index estimated via interpolation for certain models

Legend:
- OpenAI (black)
- xAI (purple)
- DeepSeek (red)
- Google (green)
- Anthropic (brown)
- Meta (blue)

Y-axis: Artificial Analysis Intelligence Index (0 to 75)
X-axis: Model Release Date (4Q22 to 2Q25)

Labeled data points:
- GPT-3.5 Turbo
- GPT-4
- GPT-4 Turbo
- GPT-4o (May '24)
- o1-preview
- o1
- o3-mini (high)
- o3*
- Grok 1
- Grok 2 (beta)
- Grok 2 (Dec '24)
- Grok 3*
- Grok 3 Reasoning Beta*

* Unreleased as of 21 February 2025, Intelligence Index estimated based on lab claims

Artificial Analysis

112. Simplify

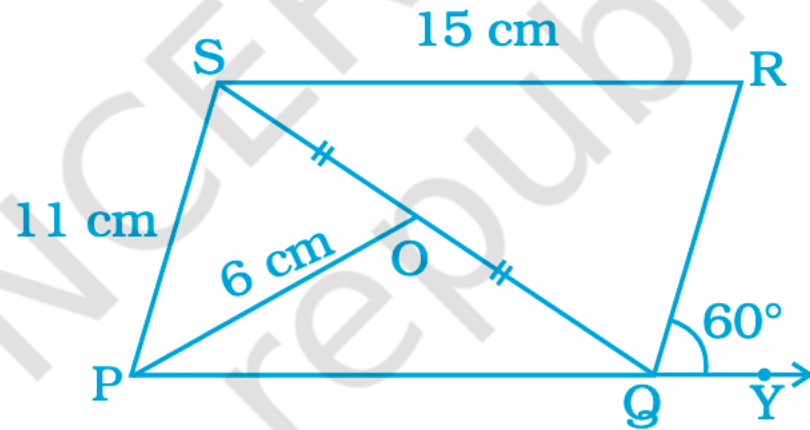(a) $\dfrac{32}{5} + \dfrac{23}{11} \times \dfrac{22}{15}$

(c) $\dfrac{3}{7} + \dfrac{-2}{21} \times \dfrac{-5}{6}$

151. A skirt that is $35\frac{7}{8}$ cm long has a hem of $3\frac{1}{8}$ cm. How long will the skirt be if the hem is let down?
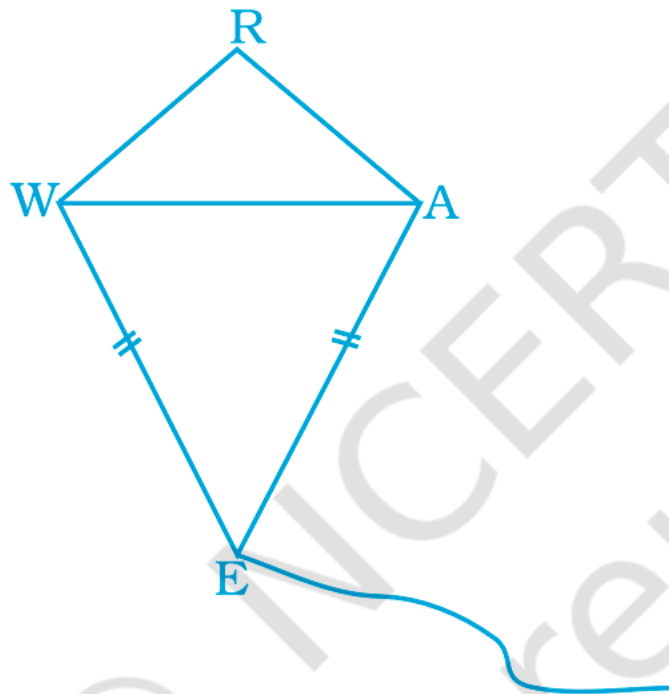
77. $3(5x - 7) + 2(9x - 11) = 4(8x - 7) - 111$

84. The sum of three consecutive even natural numbers is 48. Find the greatest of these numbers.

147. In parallelogram PQRS, O is the mid point of SQ. Find $\angle$S, $\angle$R, PQ, QR and diagonal PR.

151. In kite WEAR, $\angle WEA = 70°$ and $\angle ARW = 80°$. Find the remaining two angles.

19. The perimeter of a trapezium is 52 cm and its each non-parallel side is equal to 10 cm with its height 8 cm. Its area is

    (a) 124 cm²   (b) 118 cm²   (c) 128 cm²   (d) 112 cm²

20. Area of a quadrilateral ABCD is 20 cm² and perpendiculars on BD from opposite vertices are 1 cm and 1.5 cm. The length of BD is

    (a) 4 cm   (b) 15 cm   (c) 16 cm   (d) 18 cm

21. A metal sheet 27 cm long, 8 cm broad and 1 cm thick is melted into a cube. The side of the cube is

    (a) 6 cm   (b) 8 cm   (c) 12 cm   (d) 24 cm

22. Three cubes of metal whose edges are 6 cm, 8 cm and 10 cm respectively are melted to form a single cube. The edge of the new cube is

    (a) 12 cm   (b) 24 cm   (c) 18 cm   (d) 20 cm