## **ANSWER KEY**

1st Amherst Quant Competition 2025 Chapter of



Estimathon® is a competition sponsored and designed in its entirety by:



Hosted by:



- 1. The highest total number of runs scored by any team in a given match at the 2019 ICC Cricket World Cup. 397
- 2. Operating Expenses of Amherst College in FY 2024. 275036517
- 3. The number of integers between 1 and 1 billion that can be represented as the product of a palindrome and a perfect square. 735041
- 4. The standard boiling point of oxygen, in degrees Kelvin. 90.19
- 5. The current distance between Mercury and Mars, in kilometers. 170030000
- 6. The number of US dimes minted in 2022, 3134000000
- 7. The ratio: (volume / average orbit distance) of Jupiter as per NASA. 709998.73
- 8. The number of followers that Virat Kohli has on Instagram. 270262287
- 9. The number of Tesla Supercharger ports in the US. 29601
- 10. The total number of commercial pools in the US. 309000

$$\int\limits_{0}^{11\cdotrac{\pi}{6}}rac{\mathrm{e}^{x}\sin(x)\sqrt{1-x^{4}}}{rctan(rccos(x^{2}))}\,\mathrm{d}x$$

11. modulus is 2022957.523

- 12. Percentage increase in Total Ad Revenue from 2003 to 2024 Super Bowl. 399.616
- 13. Total value (USD) of library books at Amherst College in FY'20. 33152046