

UC Merced Applied Math Problem of the Month

November 2025

Find all integers n such that $2^{2020} + 2^{2024} + 2^n$ is a perfect square. Can you characterize all integer triples (α, β, γ) such that $2^\alpha + 2^\beta + 2^\gamma$ is a perfect square?

To submit your solutions for a chance to win an Amazon gift card, and to find out detailed contest rules,

- scan the QR code, or
- go to <https://bit.ly/UCM-POTM>

