

Coin Calculation (6.6.C.13.4)

Illustrative Mathematics

13.4: Coin Calculation

Andre and Elena knew that after 28 days they would have 2^{28} coins, but they wanted to find out how many coins that actually is. Andre wrote $2^{28} = 2 \cdot 28 = 56$.

Elena said, "No, exponents mean repeated multiplication. It should be $28 \cdot 28$, which works out to be 784." Do you agree with either of them? Explain your reasoning.