

# More Fun with Prime Numbers

## Week 2

# Homework

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# Problem 1

Who first wrote the proof of Fermat's Theorem on Sums of Two Squares?

- (a) Archimedes of Syracuse
- (b) Leonhard Euler
- (c) Joseph-Louis Lagrange
- (d) Don Bernard Zagier

➤ Fermat usually did not write a proof of the results he discovered.

# Problem 1

**Answer** (b) Leonhard Euler

- Euler proved it in 1740's.
- Lagrange also gave another proof in 1770's.
- Zagier gave a 'one-sentence proof' in 1990.
- Many proofs of Fermat's Thm on Sums of Two Squares are known today.

Leonhard  
Euler  
(1707-1783)

