



► Introduction

► Week 1

▼ Week 2

Review of Week 1

Laws of Prime Numbers

Week 2 Problems due
Feb 03, 2016 at 23:30
UTC

Homework 2

Homework 2 due Feb
03, 2016 at 23:30 UTC

Completion Checklist 2

Completion Checklist 2
due Feb 03, 2016 at
23:30 UTC

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PROBLEM 4 (3/3 points)

Let P be a prime number whose remainder is 1 when we divide it by 4. Fermat's theorem on sums of two squares says that it can be written as the sum of two squares:

$$P = X^2 + Y^2$$

Confirm this theorem for the following prime numbers. Write each of them as the sum of two squares in ascending order.

(1) $53 = A^2 + B^2$

(2) $61 = C^2 + D^2$

(3) $97 = E^2 + F^2$

A	B	C
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✓	✓	✓
<input type="text" value="2"/>	<input type="text" value="7"/>	<input type="text" value="5"/>
D	E	F
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✓	✓	✓
<input type="text" value="6"/>	<input type="text" value="4"/>	<input type="text" value="9"/>

You have used 1 of 2 submissions



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