Attendance for Dr. Z.'s MathHistory for Lecture 5 (due no later than 10 minutes after class)

NAME: (print!) Karan Amin

Email to DrZlinear@gmail.com right after class

Subject:p5

with an attachment p5FirstLast.pdf

Part I: List all the "attendance questions" during the lecture, followed by your answers.

Part II:

1. State the Pythagorean Theorem and prove it in **two ways**

(I) Using the decomposition of an $(a+b)\times(a+b)$ square into an $a\times a$ square, a $b\times b$ square, and four right-angled triangles with sides a, b and hypotheneus c, and comparing it with a decomposition consisting of a $c\times c$ square and four right-angled triangles with sides a, b and hypotheneus c,

(II) Using similar triangles, by taking a right-angled triangle ABC with such that $|AC| = b$ and $|BC| = a$, and $|AB| = c$, such that AB is horizontal, calling the projection of C to AB, C', and considering the three triangles ABC, ACC' and BCC'.

2. Find the first three smallest *primitive* Pythagorean triples.

Part I

Once upon a time there ~~was~~ were three ladies of the First Peoples of America sitting around the campfire

On a reindeer skin sat a lady who was the mother of a fine young warrior who weighted 140 poonds

On a buffalo skin sat a lady who was the mother of a fine young warrior who weighted 160 pounds

The third lady, as well she might, was sitting on the skin of a hippopotamus, as she herself weighed a mighty 300 pounds

As you can see.

The squaw on the hippopotamus is equal to the sa~~m~~s of the squaws on the other two hides.