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

NAME: (print!) _____

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.