

Real Quiz # 4 for Dr. Z.'s MathHistory

NAME: (print!) _____

E-MAIL ADDRESS: (print!) _____

1. (2 points) What is the difference between *arithmetic* and *logistics* in Greek mathematics?
2. (1 points) Did the ancient Greeks have a notion of real numbers? Was the Pythagorean theorem a relation between the lengths of the sides of a right-angled triangle?
3. (2 point) What is the best known achievement of Hindu mathematics?
4. (2 points) Prove that there are infinitely triples of **positive** integers a, b, c such that

$$a^2 + b^2 = c^2 \quad .$$

5. (3 points) There are two people A and B each of them is either a Truth-Teller or a Lie-Teller. A Truth-Teller *always* tell the truth. A Lie-Teller *always* tell lies.

Which of the possible scenarios (if any!)

- (a) Both A and B are truth-tellers (b) Both A and B are Lie-Tellers (c) A is a Truth-Teller and B is a Lie-Teller (d) A is a Lie-Teller and B is a Truth-Teller

are compatible with the following statements uttered by A and B

A: B is a Lie-Teller

B: A is a Lie-Teller

EXPLAIN!