1 Pythagoras's theorem has been scorched into millions if not billions of human brains. It is
2 the fundamental theorem that every innocent schoolchild is forced to learn.

3 In the sixth century B.C., Pythagoras of Samos was one of the most influential and yet
4 mysterious figures in mathematics. Because there are no firsthand accounts of his life and work,
5 he is shrouded in myth and legend, making it difficult for historians to separate fact from fiction.
6 What seems certain is that Pythagoras developed the idea of numerical logic and was
7 responsible for the first golden age of mathematics.

8 Thanks to his genius, numbers were no longer merely used to count and calculate, but
9 were appreciated in their own right. He studied the properties of particular numbers, the
10 relationships between them, and the patterns they formed. He realized that numbers exist
11 independently of the tangible world and therefore their study was untainted by the inaccuracies
12 of perception. This meant he could discover truths that were independent of opinion or
13 prejudice and that were more absolute than any previous knowledge.

14 He gained his mathematical skills on his travels throughout the ancient world, he
15 gathered many mathematical techniques from the Egyptians and Babylonians. Both these
16 ancient peoples had gone beyond the limits of simple counting and were capable of performing
17 complex calculations that enabled them to create sophisticated accounting systems and
18 construct elaborate buildings. Indeed they saw mathematics as merely a tool for solving
19 practical problems; the motivation behind discovering some of the basic rules of geometry was
20 to allow reconstruction of field boundaries that were lost in the annual flooding of the Nile. The
21 word itself, geometry, means "to measure the earth".

22 Pythagoras observed that the Egyptians and Babylonians conducted each calculation in
23 the form of a recipe that could be followed blindly. The recipes, which would have been passed
24 down through the generations, always gave the correct answer and so nobody bothered to
25 question them or explore the logic underlying the equations. What was important for these
26 civilizations was that a calculation worked---why it worked was irrelevant

27 After twenty years of travels Pythagoras had assimilated all the mathematical rules in the
28 known world. He set sail for his home island of Samos with intention of founding a school
29 devoted to the study of philosophy and, in particular, concerned with research into his newly
30 acquired mathematical rules. He wanted to understand numbers, not merely exploit them.

31 While attending the Olympic Games, Leon, Prince of Phlius, asked Pythagoras how he
32 would describe himself. Pythagoras replied," I'm a philosopher", but Leon had not heard the
33 world before and asked him to explain.

34 "Some people are influenced by the love of wealth while others are blindly led on by the mad
35 fever for power and domination, but the finest type of man gives himself up to discovering the
36 meaning and purpose of life itself. He seeks to uncover the secrets of nature. This is the man I
37 call a philosopher for although no man is completely wise in all respects, he can love wisdom as
38 the key to nature's secrets."

From:
Fermat's Enigma, by Simon Singh
The Saga of Mathematics by Lewinter-Widulski

I. GLOBAL UNDERSTANDING

- What is the text about ? Circle the correct answer

  ➤ Olympic Games in the sixth century B.C.,
  ➤ The use of mathematics.
  ➤ The differences between mathematics and philosophy.
  ➤ Exploitation of numbers.
  ➤ Pythagoras's interest in mathematics.
  ➤ The reconstruction of field boundaries in Egypt.

II. DETAILED UNDERSTANDING

- Fill in the following blanks:

  Jobs of the men mentioned:

  ➤
  ➤

- How did the Egyptians exploit mathematics?

- How did the Babylonians exploit mathematics?

- How did Pythagoras prepared himself to explore the logic underlying the equations?

- What was the purpose of Pyhtagoras's school?

- Find the word/sentence which means

  ➤ sagesse:
  ➤ connaissance:
  ➤ outil:
  ➤ sans intérêt:
  ➤ Age d'or:

- Translate the following words :

  ➤ firsthand (line 4)
  ➤ untained (line 11)

> ➢ boundaries (line 20)
> ➢ wealth (line 34)

III. RIGHT OR WRONG. CIRCLE THE CORRECT ANSWER AND JUSTIFY BY QUOTING THE TEXT.DON'T FORGET TO INDICATE THE LINE

- Right/Wrong: Pythagoras was influenced by the love of wealth.

- Right/Wrong: Pythagoras was such a genius that he did'nt need to work to study mathematics.

- Right/Wrong: Pythagoras 's aim was to find formulas to elaborate buildings, and to mesure the earth.

IV. TRANSLATION

- Translate into English : «Pythagore espérait découvrir l'essence du monde grâce à l'étude des mathématiques ».

V. EXPRESSION

- List 5 situations where truth can depend on opinion, time, or circumstances.
- List 5 things that in your opinion have no links with mathematics.