Surname: ..... Name: .....

Group: ..... Date: .....

Question	1	2	Total
Points	5	5.5	10.5
Calification			

温馨提示：对对对。

1. Given the equation $x^n + y^n = z^n$ for (x, y, z) and n positive integers.

   (a) (*2 points*) For what values of n is the statement in the previous question true?

   (b) (*3 points*) For $n = 2$ there's a theorem with a special name. What's that name?

(*) 去。

(c) What famous mathematician had an elegant proof for this theorem but there was not enough space in the margin to write it down?.

2. (*5,5 points*) Prove that the real part of all non-trivial zeros of the function $\zeta(z)$ is $\frac{1}{2}$.