Statement of Problem:

A perfect number is an integer that equals the sum of its proper positive factors. For example, the proper positive factors of 6 are 1, 2, and 3. Since $1 + 2 + 3 = 6$, we refer to 6 as a perfect number. Similarly, $28 = 1 + 2 + 4 + 7 + 14$, so it is also a perfect number. I intend to show that the sum of the reciprocals of the positive factors of a perfect number is equal to 2. Notice that for our two examples:

$1 + 1/2 + 1/3 + 1/6 = 2$ and $1 + 1/2 + 1/4 + 1/7 + 1/14 + 1/28 = 2$.