Problem of the Week

Proposed by Bernardo Ábrego and Silvia Fernández   October 31-November 7

Show that 2005 cannot be written as the sum of numbers each of them equal to 119 or 18. However, prove that any number greater than 2005 can be written as a sum of numbers each of them 119 or 18. For example 2010 is the sum of six 119s and seventy two 18s, that is, $2010 = 119(6) + 18(72)$.