Mathematics Problem of the Week

Problem number 236

Posted Monday October 6th 2014

Submit by noon, Tuesday October 14th 2014

The three numbers 1, 407, and 370 are particularly interesting because when you cube their digits and find the sum, you get the number itself:

$$1^{3} = 1$$

$$4^{3} + 0^{3} + 7^{3} = 64 + 0 + 343 = 407$$

$$3^{3} + 7^{3} + 0^{3} = 27 + 343 + 0 = 370$$

Can you find another number with this property? Can you find more than one?