



### Problem 3. «A numerical rebus»

Buratino keeps his Golden Key in the safe that is locked with a numerical password. For secure storage of the password he replaced some digits in the password by letters (in a way that different letters substitute different digits). After replacement Buratino got the password **NSUCRYPTO17**.

Alice the Fox found out that:

- the number **NSUCRYPTO** is divisible by all integers  $n$ , where  $n < 17$ , and
- the difference **NSU** – **CRY** is divisible by 7.

Could she find the password?

**Remark.** Here we denote  $\overline{ABC\dots}$  by **ABC...**

