

Good Generator Functions Have Maximal Cycles

$$F(x) = (313x + 307) \bmod 256$$

The “mod 256” only allows 256 different answers (from 0 to 255).

$F(x)$ is a **good** random number **generator**

- in the sense that the **sequence**
- **covers all 256 possible values.**

In other words,

- you won't see your first number again
- until you have computed **$F(x)$** 256 times.