Problem 23

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Lehmer LCG Equation
$$x_i \leftarrow x_{i-1} * a \bmod m$$

When $m = 6$, the parameters that maximize the period of a Lehmer linear congruential generator are:

$$a = 5,\ x_0 = 2.$$

With these parameters the period is length 2, and is as follows: $x_0 = 2$, $x_1 = 4$, $x_2 = 2$, $x_3 = 4$, $x_4 = 2$, ...