The Doubling Sequence

CSE 1400 Applied Discrete Mathematics

Spring 2013

The purpose of this exercise is to test your knowledge of the doubling and other geometric sequences.

1. What is the formula for $d(n)$, the function that defines terms in the doubling sequence?

2. What is the recurrence equation that defines terms in the doubling sequence?

3. What is the name for a sequence of the form

$$1, r, r^2, r^3, r^4, \ldots?$$