

Exploring the first digit

1. How many numbers between 1 and 100 start with a “1”?
2. How many numbers between 1 and 1,000 start with a “1”?
3. How many numbers between 1 and 10,000 start with a “1”?
4. How many numbers between 1 and 100 start with a “2”?
5. How many numbers between 1 and 1,000 start with a “2”?
6. How many numbers between 1 and 10,000 start with a “2”?
7. How many numbers between 1 and 100 start with a “3”?
8. Roughly, what proportion of the numbers start with each of the digits 1,...,9?