Name:

Section 6.1

Let X be the set of integers from 4 to 300 inclusive.

1. How many elements are in X?

2. How many elements of X are even?

3. How many elements of X are odd?

4. How many elements of X are divisible by 5?

5. How many elements of X are greater than 72?

6. How many elements of X have all distinct digits?

7. How many elements of X contain the digit 7?

8. How many elements of X do not contain the digit 0?

9. How many elements of X are greater than 101 and do not contain the digit 6?

10. How many elements of X have digits in strictly increasing order? (examples: 125, 48, 3)

11. How many elements of X are of the form abc where $a \neq 0$, a < b and c < b?

12. How many three digits elements of X are there where a < b or c < b?