

1

(A) is 20 in it?

(B) is 175?

NO

NO

sample set of infinite set
 $S = \{1, 3, 7, 15, 31, 63, 127, 255, \dots (2^{n+1})\}$

$$2(1) + 1 = 3 \quad 2(3) + 1 = 7 \quad \dots$$

2

infinite set

$S = \{a, abc, abcbc, abcbcbc, \dots\}$

3

initial = 3 $n = 3$ $2n - 3 = 2(3) - 3 = 3$ every time

$S = \{3, 3, 3, \dots\} = \overline{3}$ to infinity

4

$\{7, 17, 27, 37, 47, \dots\}$

(1) $7 \in S$ and if $n \in S$, then $n+10 \in S$

5

S consists of strings beginning with c with then 3 possibilities of $[a, b, c]$ for each letter after behind the c 's.

⑥ $(1,2)$, $(3,2)$, $(1,4)$, $(2,3)$, $(5,2)$
 $(2,1)$, $(4,1)$, $(2,3)$, $(3,2)$, $(1,2)$

from the ordered pair $(1,2)$ and $(2,1)$ in the form
 (m,n) contains every 1 odd and 1 even int.
 Every integer appears, but no 2 even numbers
 together