

January 12, 2015

Sets: a collection of things

Members or Elements

$$S = \{2, 4, 6, \dots, 98\}$$

$48 \in S \Rightarrow 48$  is an element of the set  $S$ .

$\uparrow$   
element of

Is 102 an even number?  
 $102 \notin S$ ?  
 102 is not a member of set

Jan 12-9:52 AM

$$N = \{1, 2, 3, \dots\}$$

$$= \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, \dots\}$$

Prime is only divisible by itself and one.

Composite is divisible by by itself and other primes

$$\begin{array}{c} 12 = 2 \cdot 2 \cdot 3 \\ \swarrow \quad \searrow \\ 2 \quad 6 \\ \swarrow \quad \searrow \\ 2 \quad 3 \end{array}$$

Jan 12-10:37 AM