Sets

Fri 31/8

Definition : A set is a collection of objects

The objects in the set are called elements

The symbol $\in$ is used for element

The symbol $\notin$ is used to show: not an element of the set.

Eg) $\{1,3,5,7\}$ 4 elements in the set

Chain brackets

Q1) Is 2 an element of $\{1,3,5,7\}$

$2 \notin \{1,3,5,7\}$

$\{1,3,5,7\} = \{7,5,3,1\}$ The order of the elements can be changed but its still the same

Equal Sets

Two sets are equal if they contain exactly the same elements.

$A = \{4,5,6\}$ and $B = \{5,4,6\}$

$\therefore A = B$

(Therefore)

Cardinal number (#)

The number of elements in a set

Eg) Find the $\#A$ if $A = \{a,b,c,d\}$

$\#A = 4$

The null set - a set with no elements

empty set

Symbols $\emptyset$ OR $\{\}$ for the null set.