

$$A = \{1, 2, 3\}$$

$$B = \{2, 3\}$$

every element in B is in A

if every element from B is in A
is in another, we say that
B is a "subset" of A

$$B \subset A$$

$\{\text{Kiwi, Raspberry, grapes}\} = F$

$\{\text{Kiwi, grapes, Raspberry}\} = G$

$G \subset F?$
yes!

$F \subset G?$
yes!

Subset

if all $a \in A$
are also in B then

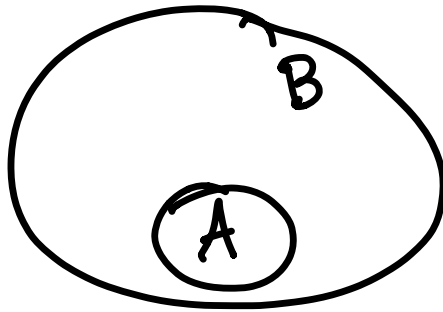
$A \subset B$

$G \subseteq F$

1. Subset $G \subset F$
2. Could be equal

"Superset"

All elements in A are also in B



$B \supset A$



"superset"

A and B

Is A a subset of B?

$A = \{ \text{dogs, cats, pandas} \}$

$B = \{ \text{elephants} \}$

$A \subset B?$

Step by step
instructions

① Compare # of elements

3 in A, 1 in B

Takiji's
Solution

② if ~~A~~ has more elements,
 $A \not\subset B$

③ if A has the same # or less

④ if all elements $A \subset B$ in A are in B, then

④ \Leftrightarrow all elements of A are in B