

Sets and Venn Diagrams

Sets are very useful for displaying information that separates into categories.

The following notation is used.

$A \subset B$ - A is a subset of B

$A \subseteq B$ - A is a subset of B and may be equal to B .

$A \cup B$ - the set of elements in either A or A

$A \cap B$ - the set of elements in both A and A

\mathcal{E} - everything in all categories.

Suppose we have sets A, B, C satisfying

$$A = \{0, 2, 4, 6, 8\}$$

$$B = \{1, 2, 3, 4\}$$

$$C = \{0, 1, 4, 9\}$$

$\mathcal{E} = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$ We can display this on a diagram, called a Venn diagram.

