

A Venn diagram illustrating the relationship between sets A_1 , A_2 , and E . A large light-gray oval represents the set E . A black curve, representing the boundary between A_1 and A_2 , passes through E , dividing it into two regions. The region of E to the left of the curve is labeled $E \cap A_1$, and the region to the right is labeled $E \cap A_2$. The labels A_1 and A_2 are placed outside the oval on the left and right respectively. The label E is placed at the top right of the oval.

A_1

$E \cap A_1$

$E \cap A_2$

E

A_2