

A

B

$A \cap B$



A Venn diagram illustrating the intersection of two sets, A and B . Set A is represented by a red ellipse on the left, and Set B is represented by a green ellipse on the right. The intersection of the two sets, $A \cap B$, is the region where the two ellipses overlap. This intersection is shaded light blue and contains a dense pattern of red and green diagonal lines. The label $A \cap B$ is centered within this shaded region. The entire diagram is set against a white background.