Cluster Assignment: Union and Intersection Properties

Cluster C_1
Cluster C_2

$C_2 = \{x_5, x_6, x_7, x_8\}$

$C_1 = \{x_1, x_2, x_3, x_4\}$

$C_1 \cup C_2 = \{x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8\}$ **(All points)**

$C_1 \cap C_2 = \varnothing$ **(No overlap - hard assignment)**