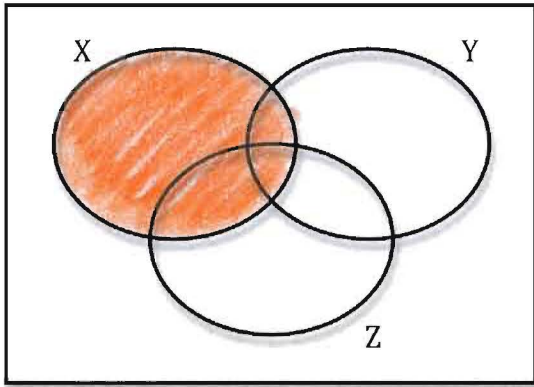
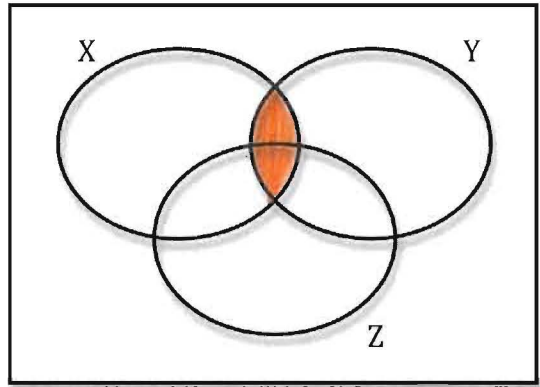


Prove that:  $X \cap (Y \cup Z) = (X \cap Y) \cup (X \cap Z)$

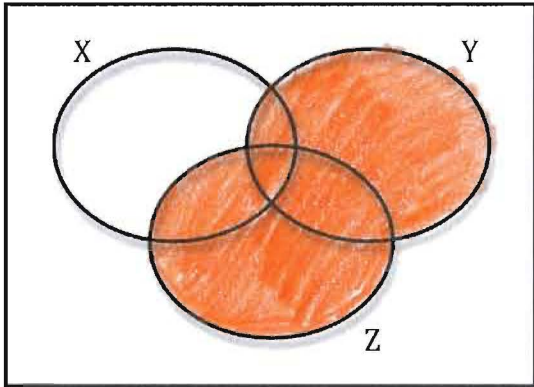
X



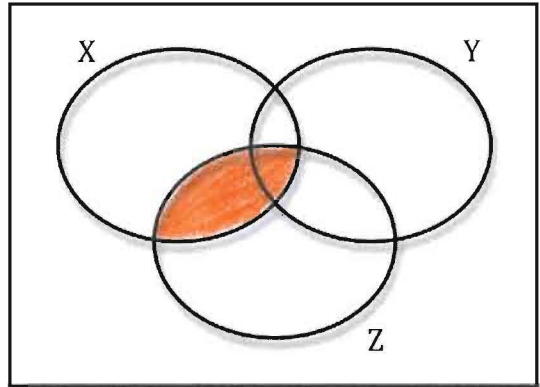
$X \cap Y$



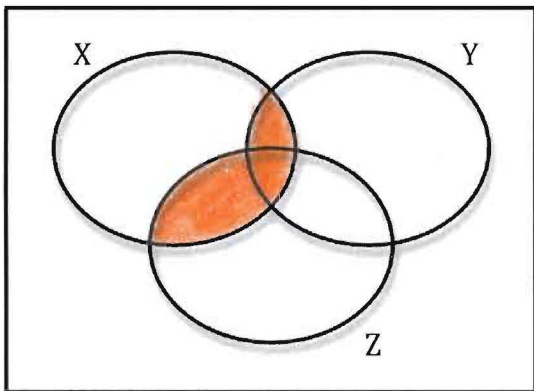
$Y \cup Z$



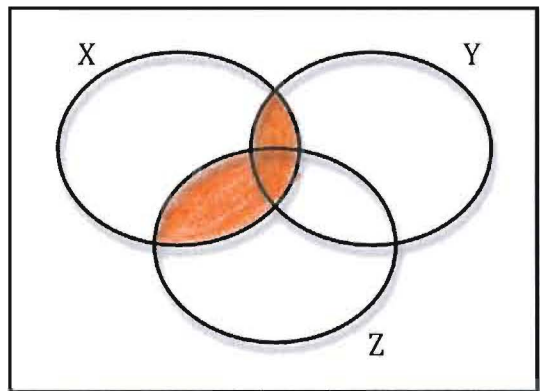
$X \cap Z$



$X \cap (Y \cup Z)$



$(X \cap Y) \cup (X \cap Z)$



=