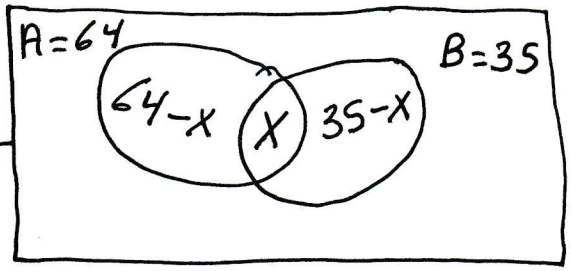
Sec 2.3, #15

$A = 64$, $B = 35$, $A \cup B = 80$, $A \cap B = ? = x$

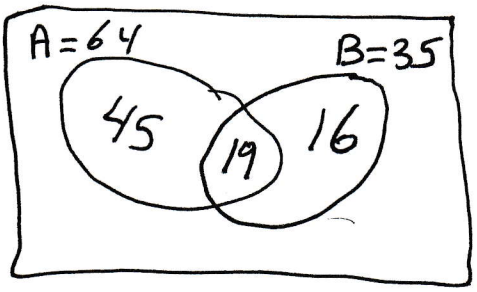


$(64-x) + (x) + (35-x) = 80$

$99 - x = 80$

$99 - 80 = x$

$19 = x$



$n(A) = 64$

$n(A)$ only $= 45$

$n(A - B) = 45$

$n(A \cap B') = 45$

$n(B - A) = 35$

$n(B \cap A') = 35$

Method 2 $A \cup B = A + B - A \cap B$

$80 = 64 + 35 - x$

$x = 19$