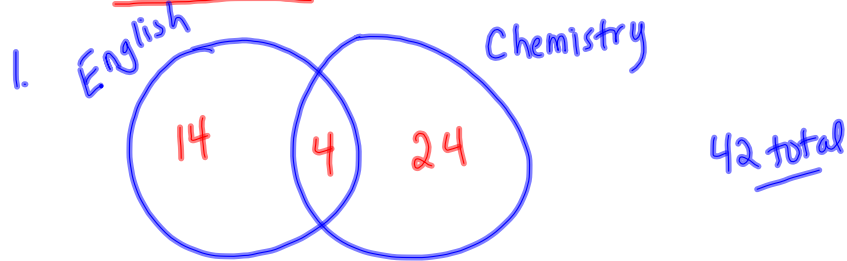


Worksheet

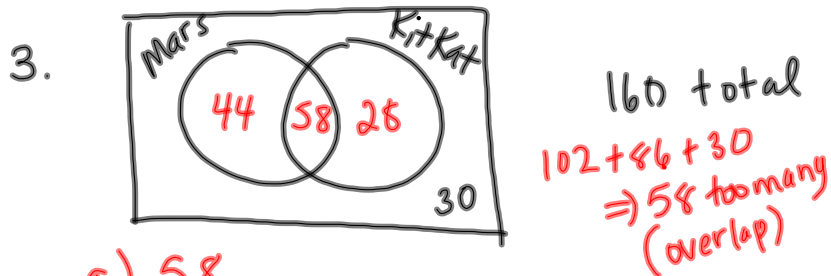
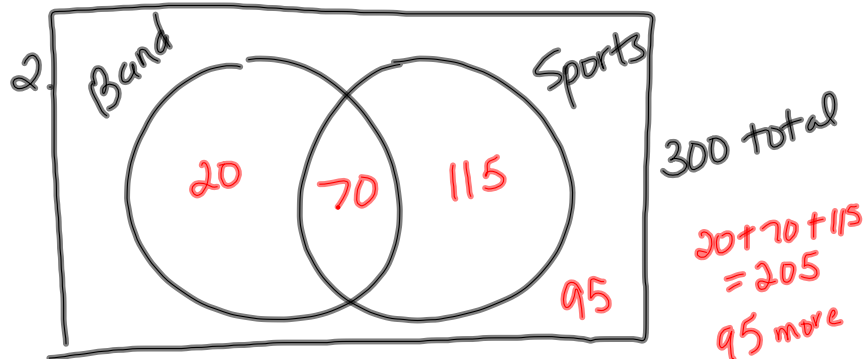


a) Both (ENC) = 4

$$\begin{array}{r} 18 \\ + 28 \\ \hline 46 \end{array}$$

b) English or Chem (EUC) = 42

\* 4 in overlap



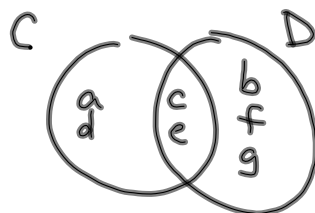
a) 58

b) 28

4.  $C = \{a, c, d, e\}$

$D = \{b, c, e, f, g\}$

D - C ⇒ what elements are in D but not C.



Ans b, f, g

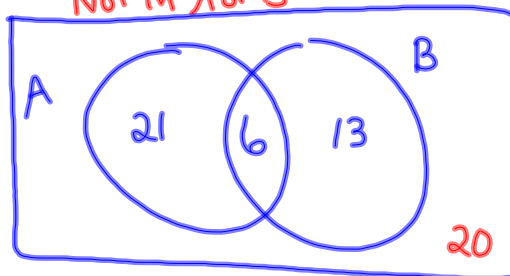
5.  $A \cap B \Rightarrow$  what are in both?  
 $\{2, 7\}$

6.  $n(A) = 12$  elements  
 ↑  
 How many elements are in A?

7.  $n(U) = 60$ ,  $n(A) = 27$ ,  $n(B) = 19$ ,  
 $n(A \cap B) = 6$   
 Total = 60 both

$n((A \cup B)')$

Not in A or B



8a) Not empty  $\{2, 4\}$

b) empty  $\emptyset$

9.  $A = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20\}$   
 Natural #s 1-20

$B = \{1, 2, 3, 4, 6, 8, 12, 24\}$   
 Factors of 24

a)  $A \cup B = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 24\}$   
 (Union)  
 (all elements)

b)  $A \cap B = \{1, 2, 3, 4, 6, 8, 12\}$   
 Intersection  
 (Only in both)

10.a)  $S \subset T$  ?

↑ subset  
are all elements of  $S$  in  $T$ ?

No, 4, 8 missing

b)  $T \subset R$ ? yes

11.  $A$  and  $B$

$A$  and  $C$

12.  $U = \{1, 2, 3, 4, 5, 6, 7, 8, 9\}$   
Universal

a)  $A' = \{2, 4, 6, 8\}$

→  $A$  prime  
→ complement of  $A$   
→ elements in the  
Universal set but  
Not in  $A$ .

b)  $A \cap B = \emptyset$