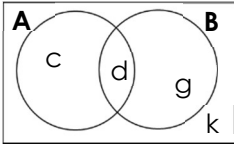
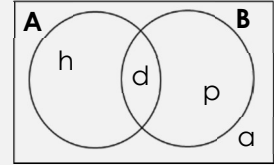
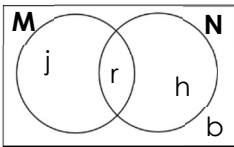


Venn Diagrams represent data in a way that we can understand much better because we can see which set each element belongs to or doesn't belong to. Data enclosed in a circle belongs to that set. Data outside of the circle does not. No matter where the data is, as long as it is bound by the circle, it is a part of that set. The place where both circles overlap is called the intersection. The union is all data enclosed by both circles. $A \cap B = \{d\}$ $A \cup B = \{h, d, p\}$ $A' = \{a, p\}$



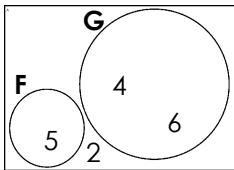
1. Tell which letters are in the region represented by:

- a) A _____ b) B _____ c) $A \cap B$ _____ d) $A \cup B$ _____
 e) A' _____ f) B' _____ g) $(A \cap B)'$ _____ h) $(A \cup B)'$ _____



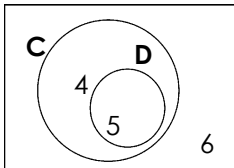
2. Tell which letters are in the region represented by:

- a) N _____ b) $N \cap M$ _____ c) $M \cup N$ _____ d) $(M \cap N)'$ _____
 e) M _____ f) M' _____ g) N' _____ h) $(N \cup M)'$ _____



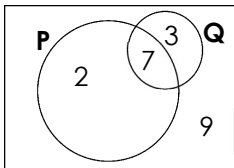
3. Tell which numbers are in the region represented by:

- a) F _____ b) G _____ c) $G \cup F$ _____ d) $F \cap G$ _____
 f) G' _____ g) F' _____ e) $(F \cap G)'$ _____ h) $(G \cup F)'$ _____



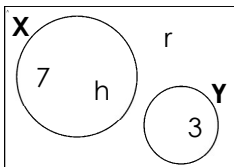
4. Tell which numbers are in the region represented by:

- a) C _____ b) D _____ c) $C \cup D$ _____ d) $D \cap C$ _____
 e) D' _____ f) C' _____ g) $(C \cap D)'$ _____ h) $(D \cup C)'$ _____



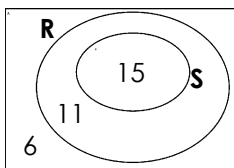
5. Tell which numbers are in the region represented by:

- a) Q _____ b) P _____ c) $P \cup Q$ _____ d) $Q \cap P$ _____
 e) P' _____ f) Q' _____ g) $(P \cap Q)'$ _____ h) $(Q \cup P)'$ _____



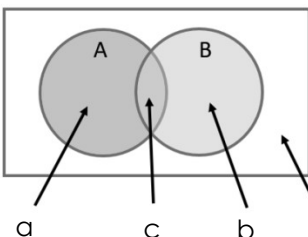
6. Tell which elements are in the region represented by:

- a) X _____ b) Y _____ c) $X \cup Y$ _____ d) $Y \cap X$ _____
 e) Y' _____ f) X' _____ g) $(X \cap Y)'$ _____ h) $(X \cup Y)'$ _____



7. Tell which numbers are in the region represented by:

- a) R _____ b) S _____ c) $R \cup S$ _____ d) $S \cap R$ _____
 e) S' _____ f) R' _____ g) $(R \cap S)'$ _____ h) $(R \cup S)'$ _____



8. Describe in words, the regions labelled in the diagram at the left:

- a) _____
 b) _____
 c) _____
 d) _____