1. The negating statement of “all cowards shy away from problems” is:
   A. all people, except cowards, shy away from problems
   B. no coward shies away from problems
   C. at least one coward does not shy away from problems
   D. all cowards do not shy away from problems

2. “If it’s sunny outside, Louise doesn’t want to do her homework”. Which of the following statements allows to deduce the argument above?
   A. If Louise doesn’t want to do her homework, then it isn’t sunny outside
   B. If it isn’t sunny outside, Louise wants to do her homework
   C. Louise wants to do her homework only if it isn’t sunny outside
   D. Louise wants to do her homework only in winter

3. “All sincere friends are affectionate. Some sincere friends often open their hearts. All affectionate people are sociable”. If these statements are true, then:
   A. all sincere friends are sociable
   B. all sincere friends often open their hearts
   C. all affectionate people are sincere friends
   D. there is at least one sincere friend that is not affectionate

4. “Some woods in the summer are hot, but they are all verdant”. Among the following statements, which has the same meaning as the original?
   A. Some woods in the summer are verdant, but they’re all hot
   B. Some of the woods that are hot in the summer are verdant
   C. Some of the woods that are verdant, are hot in the summer
   D. Only verdant woods are hot in the summer

5. In a class made of 11 boys and 9 girls every pupil had to choose only one extra-curricular activity, basket or volleyball. If basket was chosen by 6 pupils overall, and among them 5 are boys, how many girls chose volleyball?
   A. 6
   B. 5
   C. 8
   D. 4

6. “Greece is poorer than Germany; France is wealthier than Greece; Germany is the wealthiest of all three”. According to these statements, which of the following must be true?
   A. France is the less wealthy of all three countries
   B. France is less wealthy as Germany
   C. Greece is wealthier than Germany
   D. France is less wealthy than Greece

7. “If the house is on sale, then John wants to move”. If this statement is true, then:
   A. if John doesn’t want to move, then the house is not on sale
B. John will move only after the house has been sold
C. if the house is not on sale, then John doesn't want to move
D. if the house has been sold, then John must be already in his new house

8. Fiorenzo the baker thinks that if he wants to earn money it is important to offer different products to customers. In his bakery he sells bread, focaccia, panini and pizza in this proportion: 8:4:6:2. If in his bakery Fiorenzo has 400 items, how many panini has he got?
   A. 160
   B. 100
   C. 80
   D. 120

9. The negating statement of “Louisa is at the station or is already in the office” is:
   A. Louisa is not at the station and is not in the office
   B. Louisa is not at the station or is not in the office
   C. Louisa is at the station and is already in her office
   D. Louisa is not at the station or is already in the office
   E. 

10. Among the Venn diagrams below, which identifies the relationship among the terms:

MEANS OF TRANSPORT – BUSES - CHAIRS

   A. Diagram 1
   B. Diagram 3
   C. Diagram 2
   D. Diagram 4

11. Complete the following numerical sequence: 52, 42, 33, 25, 18, …
   A. 6
   B. 12
   C. 9
   D. 14
   E. 

12. If
   \[ \dagger + \varphi + \ddagger = (\dagger - \varphi) + 2 + 2(\varphi - \ddagger) \]
   \[ 3 : \varphi = \dagger \]
   \[ \dagger + 2 = 9 \]
   then \( \ddagger \) is equal to:
   A. 5
   B. 3
   C. 4
   D. 6