1. Let . Then the number of elements in is

a) b) c) d) 

1. Let , where each  contains  elements and  contains  elements , if each element of the set T is an element of exactly  of sets ’s and exactly  of sets ’s, then  is equal to

a) b) c) d) 

1. In a class of  students numbered  to , all even numbered students opted mathematics course, those whose number is divisible by  opted Physics course and those whose number is divisible by  opted Chemistry course. Then the number of students who did not opt for any of the three courses is

a)  b)  c)  d) 

1. If , find the value of .
2. Solve: .
3. Prove that: , where p and q are whole numbers.
4. Prove that for any two sets A and B:
5. 
6. 
7. If , prove that .
8. If , then prove .