**QUESTION :**

A and B can do some work in 12 days, B and C in 15 days & C and A in 20 days. If A, B and C are together, how many days will it take to complete?

**ANSWER :**

10 days.

**HINT :**

Find the Unit work of the combined roles and then add it and solve the equations.

**STRATEGY :**

Implementing given statement in terms of equations,we get,  
 A + B=1/12; as both do 1/12 work in 12 days. Similarly, B + C=1/15,   
 A + C=1/20.  
Now adding above equations we get,  
==>2(A + B +C)=1/12 + 1/15 +1/20;  
==>2(A + B +C)=(10+8+6)/120; as, lcm= 120,  
==>2(A + B +C)=24/120;  
==>(A + B +C)=24/240;  
==>(A + B +C)=1/10;  
hence they all work in 10 days to complete.