GOCHI CHAI

For finding the sum of multiples of a given number(p) between a range(m,n), we can simplify the problem by breaking it into two parts.

1.Finding sum of multiples of p from 1(or 0) to m-1 (as m is included in the range) and
2.Finding sum of multiples of p from 1(or 0) to n
Then taking their difference to get the final answer.
The sum of the Arithmetic progression p, p*2, p*3 ... p*N' (where N' is number of multiples of p less than or equal to n,given by N'=n//p)is given by p*(N' *(N' +1)//2) .
Hence, our required answer becomes p*(N' *(N' +1)//2) - p*(M' *(M' +1)//2) ,where M' is (m-1)//p.

C language Solution:

```
#include<stdio.h>
int main() {
	long long int l,k,ans,n,m,p;
	scanf("%lld %lld %lld ",&n,&m,&p);
	if(p==0){
		printf("0\n");
		return 0;
	}
	l = n / p;
	k = (m-1) / p ;
	ans= p * (  l*(l + 1) /2  - k*( k + 1 ) /2   );
	printf("%lld\n",ans);
	return 0;
}
```

Python Solution:

```
n,m,p=map(int,input().split())
if p==0:
	ans=0
else:
	m-=1
	l=n//p
	k=m//p
	ans=p*((l*(l+1)//2)-(k*(k+1)//2))
print(ans)
```

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