

OFFICIAL

KEY

I. PART 1. MULTIPLE CHOICE QUESTIONS (7.0 points)

Each true question gets 0,2 point.

Mã đề	Câu	Đáp án	Mã đề	Câu	Đáp án	Mã đề	Câu	Đáp án	Mã đề	Câu	Đáp án
361	1	A	363	1	A	365	1	A	367	1	C
361	2	A	363	2	D	365	2	A	367	2	D
361	3	C	363	3	C	365	3	A	367	3	D
361	4	A	363	4	D	365	4	C	367	4	D
361	5	B	363	5	D	365	5	A	367	5	B
361	6	A	363	6	D	365	6	B	367	6	D
361	7	D	363	7	B	365	7	D	367	7	B
361	8	D	363	8	D	365	8	D	367	8	D
361	9	C	363	9	B	365	9	B	367	9	A
361	10	B	363	10	D	365	10	C	367	10	A
361	11	C	363	11	A	365	11	A	367	11	C
361	12	A	363	12	A	365	12	C	367	12	C
361	13	C	363	13	A	365	13	A	367	13	C
361	14	A	363	14	A	365	14	C	367	14	A
361	15	B	363	15	C	365	15	C	367	15	D
361	16	C	363	16	A	365	16	B	367	16	C
361	17	C	363	17	B	365	17	D	367	17	A
361	18	D	363	18	A	365	18	C	367	18	B
361	19	A	363	19	D	365	19	D	367	19	A
361	20	D	363	20	D	365	20	A	367	20	B
361	21	C	363	21	C	365	21	D	367	21	C
361	22	D	363	22	B	365	22	C	367	22	C
361	23	D	363	23	C	365	23	D	367	23	A
361	24	D	363	24	A	365	24	D	367	24	C
361	25	B	363	25	C	365	25	D	367	25	A
361	26	D	363	26	A	365	26	B	367	26	B
361	27	B	363	27	B	365	27	D	367	27	C
361	28	D	363	28	C	365	28	B	367	28	C
361	29	A	363	29	C	365	29	A	367	29	D
361	30	A	363	30	D	365	30	A	367	30	A
361	31	C	363	31	C	365	31	C	367	31	D
361	32	B	363	32	D	365	32	A	367	32	C
361	33	A	363	33	C	365	33	B	367	33	B

361	34	D	363	34	B	365	34	C	367	34	C
361	35	C	363	35	A	365	35	D	367	35	B

II. PART II. PROBLEMS SOLVING (3.0 points)

Question	Solution	Mark
1	<pre> #include <bits/stdc++.h> using namespace std; long long m,n,a,b; long long gcd(long long a,long long b) { long long r; while(b!=0) { r=a%b; a=b; b=r; } return a; } long long FindLCM(long long a, long long b) { return (a * b) / gcd(a, b); } int main() { cin>>a>>b; cout<<FindLCM(a,b); } </pre>	
2	<pre> #include <bits/stdc++.h> using namespace std; long long n; void countDivisors(long long n) { long long root_n = sqrt(n); // If n is a perfect square, // then it has odd divisors if (root_n * root_n == n) cout<<"odd"; else cout<<"even"; } </pre>	

	<pre> } int main() { cin>>n; countDivisors(n); return 0; } </pre>	
3	<pre> #include <bits/stdc++.h> using namespace std; long long m,n,a,b; long long FindLCM(long long a, long long b) { return (a * b) / __gcd(a, b); } long long rangeDivisor(long long m, long long n, long long a, long long b) { // Find LCM of a and b long long lcm = FindLCM(a, b); long long a_divisor = n / a - (m - 1) / a; long long b_divisor = n / b - (m - 1) / b; // Find common divisor by using LCM long long common_divisor = n / lcm - (m - 1) / lcm; long long ans = a_divisor + b_divisor - common_divisor; return ans; } int main() { cin>>m>>n>>a>>b; cout << rangeDivisor(m, n, a, b); return 0; } </pre>	

----- THE END -----