

Student Name: _____ Date: _____ Score: _____ / 50

HCF (HIGHEST COMMON FACTOR)

The largest number that divides evenly into two or more numbers. *Example: Factors of 8 (1,2,4,8) & 12 (1,2,3,4,6,12) → HCF = 4*

LCM (LOWEST COMMON MULTIPLE)

The smallest non-zero number that is a multiple of two or more numbers. *Example: Multiples of 4 (4,8,12...) & 6 (6,12...) → LCM = 12*

SECTION A: Find the Highest Common Factor (HCF)

12 Marks

1. Find the HCF of 6 and 9.

Factors of 6: _____
Factors of 9: _____

HCF = _____

2. Find the HCF of 12 and 18.

Factors of 12: _____
Factors of 18: _____

HCF = _____

3. Find the HCF of 15 and 25.

Factors of 15: _____
Factors of 25: _____

HCF = _____

4. Find the HCF of 20 and 30.

Factors of 20: _____
Factors of 30: _____

HCF = _____

SECTION B: Find the Lowest Common Multiple (LCM)

12 Marks

5. Find the LCM of 3 and 5.

Multiples of 3: _____
Multiples of 5: _____

LCM = _____

6. Find the LCM of 4 and 6.

Multiples of 4: _____
Multiples of 6: _____

LCM = _____

7. Find the LCM of 8 and 12.

Multiples of 8: _____
Multiples of 12: _____

LCM = _____

8. Find the LCM of 5 and 10.

Multiples of 5: _____
Multiples of 10: _____

LCM = _____

SECTION C: Understanding Factors & Multiples**10 Marks**

- a) The HCF of any two prime numbers is always _____.
b) The smallest multiple of a number is the _____ itself.
c) Is 4 a factor of 34? (Yes / No) _____
- d) The LCM of 2 and 7 is _____.
e) The largest factor of 24 is _____.
f) Every number is a multiple of _____.

SECTION D: Word Problems (Apply Your Knowledge)**16 Marks**

Question 9: Riya has 12 blue pens and 18 red pens. She wants to pack them into gift bags such that every bag has the exact same number of blue and red pens with no pens left over. What is the maximum number of gift bags she can make? (Hint: Find HCF)

Answer: _____ gift bags

Question 10: Two alarm clocks ring at different intervals. The first clock rings every 4 minutes, and the second clock rings every 6 minutes. If both clocks ring together right now, after how many minutes will they ring together again? (Hint: Find LCM)

Answer: After _____ minutes

Question 11: A teacher has 20 chocolates and 25 juice boxes to distribute equally among students. What is the greatest number of students who can receive an equal share without anything remaining?

Answer: _____ students

★ BRAIN TEASER CHALLENGE

The HCF of two numbers is 4, and their LCM is 24. If one of the numbers is 8, can you find the other number?

Challenge Answer: _____