Worksheet

1. Write all the factors of :
   a. 66 b. 34 c. 553 d. 61 e. 21 f. 45 g. 48
2. Write the first 5 multiples of the following.
   a. 41 b. 12 c. 21 d. 1010 e. 11
3. Match the following.

a. 37	i. multiple of 12
b. 81	ii. a prime number
c. Factors of 12	iii. multiple of 9
d. 24	iv. 1, 2, 3, 4, 6, 12

4. What are composite numbers? Give three examples and write the factors of the composite numbers written by you.
5. Find out which number has more factors 254 or 1001? Write the factors.
6. Whose sum is more—the number of multiples of 8 between 37 and 80 or the number of multiples of 6 between 6 and 37.
7. How many multiples of 111 lie between 550 and 750?
8. Write the factors of 84.
9. Find the HCF of the following pairs.
   a. 24, 12 b. 6, 18 c. 49, 56
10. Find the LCM of the following pairs.
    a. 2, 5 b. 24, 26 c. 54, 68
11. What is a prime number? What is a composite number? Find all prime numbers between 20 and 40.
12. Find the prime factorisation of the smallest 4-digit number.
13. Ryma had three red ribbons of lengths 12 cm, 36 cm, and 60 cm. She cut the ribbons into smaller pieces of equal length, what is the length of each ribbon strip thus obtained?
14. Write all the even and odd prime factors of 75.
15. Write the smallest and the greatest one, two and three-digit prime numbers.
16. Write any two consecutive composite numbers.
17. Write a prime number which remains the same even if its digits are interchanged.
18. Write any two pairs of prime numbers less than 100 whose sum is divisible by 9.
19. Write any two pairs of prime numbers whose sum is divisible by 7.
20. Express the following as the sum of two prime numbers.
    a. 103 b. 72 c. 90 d. 349
21. Find the largest number which divides 1328 and 2150 leaving remainder 8 and 5, respectively.
22. Write three prime numbers whose sum is 32.

23. Write the smallest 10-digit number using all the digits which is divisible by 2, 3, 4, 5, 6, 8 and 9.

24. Write the greatest 10-digit number using all the digits which is divisible by 2, 3, 4, 5, 6, 8 and 9.

25. Write all the prime numbers of 2-digits whose digits are also prime.

Answers to Worksheet

1. a. 1, 2, 3, 6, 11, 22, 33, 66 b. 1, 2, 17, 34 c. 1, 7, 79, 553
   d. 1, 61 e. 1, 3, 7, 21 f. 1, 3, 5, 9, 15, 45 g. 1, 2, 3, 4, 6, 8, 12, 16, 48
2. a. 41, 82, 123, 164, 205 b. 12, 24, 36, 48, 60
   c. 21, 42, 63, 84, 105 d. 1010, 2020, 3030, 4040, 5050
   e. 11, 22, 33, 44, 55
3. a. ii b. iii c. iv d. i
5. 254 = 1, 2,127,254 and 1001 = 1, 11, 13, 77, 91, 1001
   Thus, 1001 has more factors than 254.
6. The sum of multiples of 8 is more than the sum of multiples of 6.
7. 2
8. 1, 2, 3, 4, 6, 7, 12, 14, 21, 42, 84
9. a. 12 b. 6 c. 7
10. a. 10 b. 312 c. 1836
11. 23, 29, 31, 37
12. $2 \times 2 \times 2 \times 5 \times 5 \times 5$
13. 12 cm
14. No even prime factor exists for 75, odd prime factors 3, 5
15. One digit: 2, 9, two digit: 11, 97, three digit: 101, 997
16. 14, 15
17. 11
18. 67, 5 and 97, 2
19. 37, 5 and 47, 2
20. a. 101 + 2 b. 67 + 5 c. 83 + 7 d. 347 + 2
21. 165
22. 2, 7, 23; 2, 11, 19; 2, 13, 17
23. 1234579680
24. 9876543120
25. 23, 37, 53, 73