MCQ WORKSHEET-I

**CLASS - VI: CHAPTER - 3**

**PLAYING WITH NUMBERS**

1. Which of the following is smallest prime number:

(a) 1 (b) 2 (c) 3 (d) 4

1. The only prime number which is also even

(a) 1 (b) 2 (c) 4 (d) 6

1. The sum of two odd and one even numbers is

(a) Even (b) Odd (c) Prime (d) Composite

1. The smallest composite number is

(a) 1 (b) 2 (c) 3 (d) 4

1. Tell the maximum consecutive numbers less then 100 so that there is no prime number

|  |  |  |  |
| --- | --- | --- | --- |
| between them |  |  |  |
| (a) 5 | (b) 6 | (c) 7 | (d) 8 |

1. If a number is divisible by 2 and 3 both then is divisible by

(a) 5 (b) 6 (c) 8 (d) 10

1. Which of the following number is divisible by 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| (a) | 121 | (b) 123 | (c) 124 | (d) 122 |
| **8.** A number is divisible by 4 if its |  |  |
| (a) Last digit is 4 |  | (b) last digit is 0 |
| (c) | last two digits are divisible by 4 | (d) last digit is | 8 |

1. Two numbers having only 1 as common factor are called

(a) Prime numbers (b) Co- prime numbers

(c) Composite numbers (d) Odd numbers

1. Which of the following pair is co-prime

(a) 6 and 8 (b) 18 and 35 (c) 7 and 35 (d) 30 and 415

1. Common factors of 15 and 25 are

(a) 15 (b) 25 (c) 5 (d) 75

1. If a number is divisible two co-prime numbers than it is divisible by their

(a) Sum also (b) Difference also (c) Product also (d) Quotient also



MCQ WORKSHEET-II

**CLASS - VI: CHAPTER - 3**

**PLAYING WITH NUMBERS**

1. The exact divisor of number 9 is

(a) 2 (b) 3 (c) 4 (d) 5

1. Which number is factor of every number

(a) 1 (b) 2 (c) 10 (d) 100

1. Numbers of factors of given number are:

(a) 1 (b) 2 (c) finite (d) infinite

1. The numbers of multiples of given number are

(a) 1 (b) 2 (c) finite (d) infinite

1. Every number is multiple of

(a) 1 (b) 2 (c) 10 (d) itself

1. A number for which sum of all its factors is equal to twice number is called

(a) Perfect number (b) even number (c) Odd number (d) Prime number

1. How many factors does 36 has

(a) 7 (b) 9 (c) 10 (d) 8

1. Which of following number is multiple of 8

(a) 2 (b) 4 (c) 10 (d) 16

1. The numbers having two factors are called

(a) Even (b) Odd (c) Prime (d) Composite

1. The numbers having more than two factors are called

(a) Prime numbers (b) Composite numbers (c) Even numbers (d) Odd numbers

1. Which number is neither prime nor composite

(a) 0 (b) 1 (c) 2 (d) 3

1. The multiple of 2 are also called

(a) Even numbers (b) Odd numbers (c) Prime numbers (d) Composite numbers

MCQ WORKSHEET-III

**CLASS - VI: CHAPTER - 3**

**PLAYING WITH NUMBERS**

1. The product of L.C.M and H.C.F. of two numbers is equal to

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (a) Sum of numbers |  | (b) Difference of numbers |  |
|  | (c) Product of numbers | (d) Quotients of numbers |  |
| **2.** | The missing number is: |  |  |  |  |
|  |  |  | 60 |  |  |  |
|  | 6 |  |  | 10 |  |  |
|  | 3 | ? | 2 |  | 5 |  |
|  | (a) 1 |  | (b) 2 |  | (c) 3 | (d) 4 |
| **3.** | What are the prime factors of greatest 4 –digit number |  |
|  | (a) 3x3x11x101 |  | (b) 9x11x101 | (c) 3x33x101 | (d) 3 x3 x 11 x11 |
| **4.** | Which of the following expression | has prime factors |  |
|  | (a) 24=2x3x4 |  | (b) 56=7x2x2x2 | (c) 70= 2x5x7 | (d)54=2x3x9 |
| **5.** | Which of the following numbers has 4 different prime factors |  |
|  | (a) 24 |  | (b) 120 |  | (c) 210 | (d)100 |
| **6.** | The product of three consecutive numbers is always divisible by |  |
|  | (a) 2 |  | (b) 4 |  | (c) 6 | (d) 8 |
| **7.** | The sum of two consecutive odd number is always divisible by |  |
|  | (a) 2 |  | (b) 4 |  | (c) 6 | (d)8 |
| **8.** | What is the H.C.F. of 18 and 48 |  |  |  |
|  | (a) 2 |  | (b) 4 |  | (c) 6 | (d)8 |
| **9.** | What is the H.C.F. two consecutive even numbers |  |
|  | (a) 1 |  | (b)2 |  | (c) 4 | (d) 8 |
| **10.** What is the H.C.F. two consecutive odd numbers |  |
|  | (a) 1 |  | (b) 2 |  | (c) 4 | (d) 8 |



MCQ WORKSHEET-IV

**CLASS - VI: CHAPTER - 3**

**PLAYING WITH NUMBERS**

1. Find the L.C.M. of 12 and 18

(a) 6 (b) 36 (c) 12 (d) 18

1. L.C.M. of two co-prime numbers is always

(a) product of numbers (b) sum of numbers

(c) difference of numbers (d)none

1. Find the least number which when divided by 6,15 and 18 leave remainder 5 in each case

(a) 90 (b) 180 (c) 95 (d)185

1. Divisibility by 2,5,10 can be checked by

(a) sum of digits (b) last digit (c) last two digits (d) last three digits

1. Which is greatest 3-digit number exactly divisible by 8,10,12

|  |  |  |  |
| --- | --- | --- | --- |
| (a) 120 | (b) 360 | (c) 960 | (d) 980 |
| **6.** 4= 2x2 , 15= 3x5, | so H.C.F. of 4 and 15 is |  |  |
| (a) 0 | (b) 1 | (c) 2 | (d) 3 |

1. Find the least number which when divided by 12, 16, 24 and 36 leaves a remainder 7 in each

case.

(a) 150 (b) 151 (c)144 (d) none of these

1. Renu purchases two bags of fertiliser of weights 75 kg and 69 kg. Find the maximum value of weight which can measure the weight of the fertiliser exact number of times.

(a) 150 (b) 138 (c)144 (d) none of these

1. Which of the following is divisible by 3?

(a)15287 (b) 15267 (c) 15286 (d) 152638

1. Which of the following is divisible by 9?

(a)15287 (b) 15267 (c) 15286 (d) 152638

1. If a number is divisible by 9, it must be divisible by \_\_.

(a) 6 (b) 3 (c) 2 (d) 12

1. Numbers having more than two factors are called Composite numbers.

(a) Prime numbers (b) Co- prime numbers

(c) Composite numbers (d) Odd numbers

PRACTICE QUESTIONS

**CLASS - VI: CHAPTER - 3**

**PLAYING WITH NUMBERS**

1. Write all the factors of 68.
2. Write first five multiples of 6.
3. Write all the factors of the following numbers :
	1. 24 (b) 15 (c) 21
	2. 27 (e) 12 (f) 20
	3. 18 (h) 23 (i) 36
4. Write first five multiples of : (a) 5 (b) 8 (c) 9
5. Find all the multiples of 9 upto 100.
6. Write all the prime numbers less than 15.
7. The numbers 13 and 31 are prime numbers. Both these numbers have same digits 1 and 3. Find such pairs of prime numbers upto 100.
8. Express the following as the sum of two odd primes.
	1. 44 (b) 36 (c) 24 (d) 18
9. Express each of the following numbers as the sum of three odd primes:
	1. 21 (b) 31 (c) 53 (d) 61
10. Write five pairs of prime numbers less than 20 whose sum is divisible by 5.
11. Give three pairs of prime numbers whose difference is 2.
12. Using divisibility tests, determine which of the following numbers are divisible by 4; by 8:
	1. 572 (b) 726352 (c) 5500 (d) 6000 (e) 12159
	2. 14560 (g) 21084 (h) 31795072 (i) 1700 (j) 2150
13. Using divisibility tests, determine which of following numbers are divisible by 6:
	1. 297144 (b) 1258 (c) 4335 (d) 61233 (e) 901352
	2. 438750 (g) 1790184 (h) 12583 (i) 639210 (j) 17852
14. Using divisibility tests, determine which of the following numbers are divisible by 11:
	1. 5445 (b) 10824 (c) 7138965 (d) 70169308 (e) 10000001

(f) 901153

1. Find the common factors of 75, 60 and 210.
2. Find the common multiples of 3, 4 and 9.
3. Write all the numbers less than 100 which are common multiples of 3 and 4.
4. A number is divisible by both 5 and 12. By which other number will that number be always divisible?
5. A number is divisible by 12. By what other numbers will that number be divisible?
6. Find the prime factorisation of 980.
7. Write the greatest 4-digit number and express it in terms of its prime factors.
8. Write the smallest 5-digit number and express it in the form of its prime factors.
9. Find all the prime factors of 1729 and arrange them in ascending order. Now state the relation, if any; between two consecutive prime factors.
10. The product of three consecutive numbers is always divisible by 6. Verify this statement with the help of some examples.
11. The sum of two consecutive odd numbers is divisible by 4. Verify this statement with the help of some examples.
12. Find the HCF of the following:
	1. 24 and 36 (ii) 15, 25 and 30
	2. 8 and 12 (iv) 12, 16 and 28
13. Find the LCM of 12 and 18.
14. Find the LCM of 40, 48 and 45.
15. Find the LCM of 20, 25 and 30.
16. Two tankers contain 850 litres and 680 litres of kerosene oil respectively. Find the maximum capacity of a container which can measure the kerosene oil of both the tankers when used an exact number of times.
17. In a morning walk, three persons step off together. Their steps measure 80 cm, 85 cm and 90 cm respectively. What is the minimum distance each should walk so that all can cover the same distance in complete steps?
18. Find the least number which when divided by 12, 16, 24 and 36 leaves a remainder 7 in each case.
19. The length, breadth and height of a room are 825 cm, 675 cm and 450 cm respectively. Find the longest tape which can measure the three dimensions of the room exactly.
20. Determine the smallest 3-digit number which is exactly divisible by 6, 8 and 12.
21. Determine the greatest 3-digit number exactly divisible by 8, 10 and 12.
22. The traffic lights at three different road crossings change after every 48 seconds, 72 seconds and 108 seconds respectively. If they change simultaneously at 7 a.m., at what time will they change simultaneously again?
23. Three tankers contain 403 litres, 434 litres and 465 litres of diesel respectively. Find the maximum capacity of a container that can measure the diesel of the three containers exact number of times.
24. Find the least number which when divided by 6, 15 and 18 leave remainder 5 in each case.
25. Find the smallest 4-digit number which is divisible by 18, 24 and 32.
26. Renu purchases two bags of fertiliser of weights 75 kg and 69 kg. Find the maximum value of weight which can measure the weight of the fertiliser exact number of times.



ASSIGNMENT QUESTIONS

**CLASS - VI: CHAPTER - 3**

**PLAYING WITH NUMBERS**

1. Write all the factors of each of the following:
	1. 125 (ii) 729 (iii) 512 (iv) 75 (v) 60
2. Write first five multiples of each of the follwing numbers:
	1. 25 (ii) 35 (iii) 45 (iv) 40
3. Find the common factors of

(i) 15 and 25 (ii) 35 and 50 (iii) 20 and 28

1. Find the common factors of
	1. 5, 15 and 25 (ii) 2, 6 and 8
2. Find first three common multiples of 6 and 8
3. Find first two common multiples of 12 and 18
4. Express each of the following numbers as the sum of two odd primes:
	1. 36 (ii) 42 (iii) 84
5. Express each of the following numbers as the sum of three odd primes:
	1. 31 (ii) 35 (iii) 49
6. Write the smallest 5-digit number and express it as a product of primes.
7. Determine the prime factorization of each of the following numbers:
	1. 216 (ii) 420 (iii) 468 (iv) 945 (v) 7325
8. Find the smallest number having three different prime factors.
9. Find the smallest number having four different prime factors.
10. Test the divisibility of the following number by 2: (i) 6520 (ii) 1245 (iii) 1268
11. Test the divisibility of the following number by 3:
	1. 70335 (ii) 607439 (iii) 9082976
12. Test the divisibility of the following number by 6: (i) 7020 (ii) 56423 (iii) 732510
13. Test the divisibility of the following number by 4:
	1. 786532 (ii) 1020530 (iii) 9801526
14. Test the divisibility of the following number by 8: (i) 8364 (ii) 7314 (iii) 36712
15. Test the divisibility of the following number by 9:
	1. 187245 (ii) 3478 (iii) 547218
16. Test the divisibility of the following number by 11:
	1. 5335 (ii) 70169803 (iii) 10000001
17. Using each of the digits 1, 2, 3 and 4 only once, determine the smallest 4-digit number divisible by 4.
18. Fatima wants to mail three parcels to three village schools. She finds that the postal charges are Rs 20, Rs 28 and Rs 36, respectively. If she wants to buy stamps only of one denomination, what is the greatest denomination of stamps she must buy to mail the three parcels?
19. Three brands A, B and C of biscuits are available in packets of 12, 15 and 21 biscuits respectively. If a shopkeepeer wants to buy an equal number of biscuits, of each brand, what is the minimum number of packets of each brand, he should buy?
20. The floor of a room is 8m 96cm long and 6m 72cm broad. Find the minimum number of square tiles of the same size needed to cover the entire floor.
21. In a school library, there are 780 books of English and 364 books of Science. Ms. Yakang, the librarian of the school wants to store these books in shelves such that each shelf should have the same number of books of each subject. What should be the minimum number of books in each shelf?
22. In a colony of 100 blocks of flats numbering 1 to 100, a school van stops at every sixth block while a school bus stops at every tenth block. On which stops will both of them stop if they start from the entrance of the colony?
23. Using divisibility tests, determine which of the following numbers are divisible by 4? (a) 4096

(b) 21084 (c) 31795012

1. Using divisibility test. determine which of the following numbers are divisible by 9? (a) 672 (b) 5652
2. Determine the least number which when divided by 3, 4 and 5 leaves remainder 2 in each case.
3. A merchant has 120 litres of oil of one kind, 180 litres of another kind and 240 litres of a third kind. He wants to sell the oil by filling the three kinds of oil in tins of equal capacity. What should be the greatest capacity of such a tin?
4. Find a 4-digit odd number using each of the digits 1, 2, 4 and 5 only once such that when the first and the last digits are interchanged, it is divisible by 4.