

# INTERNATIONAL INDIAN SCHOOL BURAIDAH

## Worksheet for the Academic Year 2023-24

CLASS: VI SUBJECT: MATHEMATICS

### LESSON: 3-Playing With Numbers

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- Five consecutive composite numbers between 25 and 50. so that there is no prime number between them are
  - 25,26,27,28,29
  - 32,33,34,35,36
  - 37,38,39,40,41
  - 48,49,50,51,52
- Which of the following numbers are prime?  
(a) 23 (b) 26 (c) 47
- Which is the smallest even prime number?
- What is the LCM of two co-prime numbers?
- What is the HCF of two consecutive odd numbers?
- Write all the prime numbers less than 15.
- Give three pairs of prime numbers whose difference is 2.
- Write all the numbers less than 100 which are common multiples of 3 and 4.
- Which of the following numbers are co-prime?  
(a) 8 and 15 (b) 17 and 34
- Write down the factors of: (a) 20 (b) 36
- Write first five multiples of: (a) 15 (b) 26
- Write the prime numbers between 10 and 40.
- Test the divisibility of the following numbers by 11.  
(a) 5335  
(b) 70169803  
(c) 10000001
- Express 44 as the sum of two odd prime numbers.
- Find the LCM of 5 and 20.
- Find the smallest number which leaves the remainder 5 when divided by 15, 20, 35. [ans-425]
- Tushar, Aman and Akash start jogging around a park at the same time. Tushar finishes one round in 36 minutes, Aman finishes in 24 minutes and Akash finishes in 12 minutes. When will they meet at the starting point again? [ans-72 minutes]

18. The length, breadth and height of a water tank are 400cm, 320cm, and 480cm respectively. Suggest the dimension of a square tile of maximum size that can be fixed on all the sides of the tank without breaking it. [ans-80 cm]
19. Find the HCF of 30 and 42.
20. Find HCF of 140, 210 and 350.
21. Find LCM of 18, 24 and 56.
22. Three bells toll at intervals of 9, 12 and 15 minutes. If they start tolling together, after what time they will next toll together?
23. Using divisibility tests determine which of the following numbers are divisible by 4 and 8.  
a. 30092    b) 252960    c) 87053
24. Using divisibility tests determine which of the following numbers are divisible by 6.  
a) 245619    b) 871520    c) 91434
25. Three boys step off together from the same place. If their steps measure 36cm, 48cm and 54cm, at what distance from the starting point will they step together?
26. Write the smallest digit in the blank space of each of the following numbers so that the number formed will be divisible by 3  
a.   42359    b. 9978  53
27. Write a digit in the blank space so that the number formed will be divisible by 11.  
a) 2755  96  
b) 28140  2
28. Write the prime factorization of the following:  
a. 105    b. 256    c. 840    d. 500
29. Using the divisibility test, determine which of the following are divisible by 2,3,4,5: (a) 2050 (b) 2108
30. Determine the smallest 3-digit number which is exactly divisible by 6, 8 and 12.

### ANSWERS

1. b
2. 23 and 47
3. 2
4. 1
5. 1
6. 2,3,5,7,11,13
7. (3,5) (5,7) (11,13)
8. Try yourself

9. 8 and 15

10. Factors of 20 – 1, 2, 4, 5, 10 and 20, Factors of 36 – 1, 2, 3, 4, 6, 9, 12, 18 and 36

11. 15 – 15, 30, 45, 60, 75                      26 – 26, 52, 78, 104, 130

12. 11, 13, 17, 19, 23, 29, 31, 37

13. All are divisible

14.  $41+3$

15. 20

16. Given in question

17. Given

18. Given

19. 6

20. 70

21. 504

22. 3 minutes

23. a) 4-yes, 8-no    b) 4-yes, 8-yes    c) 4-no, 8-no

24. a) no    b) no    c) yes

25. 4m 32 cm

26. a) 1    b) 1

27. a) 8    b) 4

28. a)  $105=5 \times 3 \times 7$     b)  $256= 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$     c)  $840=2 \times 2 \times 3 \times 2 \times 5 \times 7$   
d)  $500=5 \times 5 \times 5 \times 2 \times 2$

29. a) 2,5-yes    3,4-no    b) 2,4-yes    3,5-no

30. 120