



## TOPIC : PATTERNS AND SEQUENCE

1.find the next number in the sequence: ( PLE 2019 number 11 ).

58, 33, 17, 8. \_\_\_\_\_

2. Find the square root of 1.96

( PLE 2008 number 27 ).

3. Find the next number in the sequence. ( PLE 1999 number 8 )

0,1,2,3,5,7,9.....

4.Find the smallest number that can divided by 8 Or 12 and leaves 5 as a remainder.

(PLE 2019 number 14 ).

5. Find the square root of  $3\frac{1}{16}$

( PLE 2012 number 18 ).

6. The area of a square flower garden is 196m<sup>2</sup>. Find the length of each side.

( PLE 2016 number 11 ).





“Think”

Do not give up

Keep practicing

with

“PASS PLE”

The journey to excellence



**7. Find the value of  $2^4 + 3^0$**

( PLE 2013 number 22 ).

**8. Find the lowest common (L.C.M) of 6 and 9.**

( PLE 1998 number 26 ).

**9. Write the next number in the sequence.** ( PLE 2009 number 23 ).

1, 4, 9, 16.....

**10. Find the square root of  $7\frac{1}{9}$**

( PLE 2001 number 4 )

**11. Find the sum of the 5<sup>th</sup> and 8<sup>th</sup> prime numbers** ( PLE 2015 number 6 )

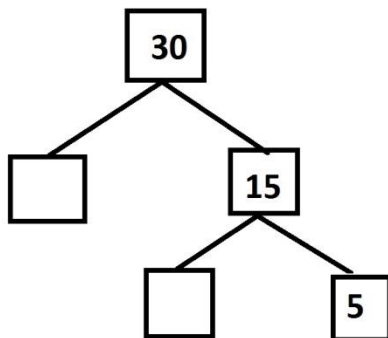
**12. Find the next number in the sequence.** ( PLE 2010 number 16 )

1, 8, 27, 64, .....



13. Find the square root of  $5\frac{4}{9}$ .  
( PLE 2004 number 19 ).

14. Fill in the missing numbers in the factor tree. ( PLE 2009 number 10 )



15. In Odokomit primary school, two bells are rung at different intervals of 30 minutes and 40 minutes. If they last rung together at 10:00am, at what time will they be rung together again. ( PLE 1997 number 33 ).

16. Without 140 and 5070 is dividing, show which of the number divisible by 3  
( PLE 2016 number 5 ).

17. The lowest common multiple (LCM) of two numbers is 72 and their greatest common factor (GCF) is 6. If one of the numbers is 24, Find the second number.

( PLE 2013 number 18 )

18. Find the Greatest common factor of (GCF) of 12 and 18.  
( PLE 2005 number 10 )

19) Find the next number in the sequence. ( PLE 2005 number 8 )

125, 64, 27, 8.....

20. Find the least number of sweets when divided among 8 boys or 6 girls equally, leaves 2 sweets as a remainder.

( PLE 2017 number 20 ).

21. Find the next number in the sequence. ( PLE 2000 number 5 ).

1,4,8,19,.....

22. The area of a square room is

$12\frac{1}{4}$  ( PLE 2006 number 15 )

23. Find the next number in the sequence. ( PLE 2006 number 9 ).

21,20,18,15,11,.....

24 Find the next number in the sequence. ( PLE 2003 number 11 ).

17,12,8,5,3,.....

25. Find the square root of  $12\frac{1}{4}$

( PLE 2007 number 21 ).



**26. Find the next number in the sequence.** ( PLE 2018 number 10 ).

1, 2, 10, 37, .....

**27. Find the next number in the sequence.** ( PLE 2017 number 4 ).

-11, -8, -5, -2, .....

**28. Find the next number in the series.** ( PLE 2002 number 11 ).

0, 3, 5, 8, 10 .....

**29. Find the next number in the sequence.** ( PLE 2008 number 13 ).

$\frac{1}{2}$  ,  $\frac{1}{4}$  ,  $\frac{1}{8}$  ,  $\frac{1}{16}$  -----

**30. Find the next number in the sequence.** ( PLE 20107 number 9 ).

2, 5, 7, 10, 12, .....

**31. The prime factors of 12 and 90 are given**

$$12 = 2^2 \times 3^1$$

$$90 = 2 \times 3^2 \times 5^1$$

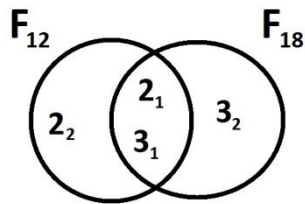
Use the given prime factors above to find the lowest common multiple (LCM) of 12 and 90.

( PLE 2016 number 13 ).



32. Without dividing, show which of the numbers 316 and 306 is divisible by 6.

33. The Venn diagram below show prime factors of 12 and 18, use it to find the LCM of 12 and 18. ( PLE 2015 number 16 )



34. Find the next number in the sequence

16, 8, 4, 2, .....

35. Using the numerals, 4, 6 and 5, Form all possible three-digit even numbers.

36. Find the product of the next two numbers in the sequence

2, 3, 6, 12, 22, ....., .....

37. Without dividing, show which of the numbers 92807 and 1011 is divisible by 11.

38. Without dividing, show which of the numbers 168 and 107 is divisible by 7

39. The ratio of two numbers is 4:5. If their GCF is 9.

(a) Find the numbers.

(b) Find the LCM of the numbers in 39 (a).

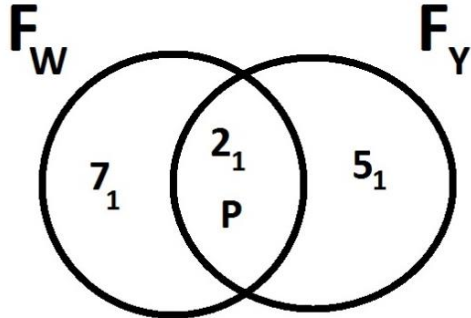
40. Find the largest number which divides 15 and gives remainder 3 and the same number when divides 19 gives remainder 1.

41. Find the lowest common factor of 12 and 16

42. Using digits 3,0,5 and 4. Find the sum of the smallest and largest four digit number that could be formed using the values above.

43. Prime factorize 72 and present your answer in subscript form.

44. Use the Venn diagram below to answer questions that follow



If the LCM of W and Y is 210.  
Find the value of W.

45. Find the GCF of W and Y

46. Find the square root of  
0.09

47. Without dividing, show which  
of the numbers 5481 and 2262  
is divisible by 9

48. Given the prime factors of  
36 and y.

$$F_{36} = \{ 2_1, 2_2, 3_1, f \}$$

$$F_y = \{ 3_1, 5_1, f, \}$$

(a) If the GCF of 36 and y is 9.  
Find the value of f.

(b) Find the value of y

49. Without dividing, show  
which of the numbers 246 and  
335 is not divisible by 3.



50. Fill in the missing number

5, 11, 2, 7, .....

51. Draw the next groupings.



52. Find the next number in the sequence,

400, 399, 391, 364, 300, .....

53. Find the square of 16.

54. Find the smallest number when divided by 12 or 18 it does not give a remainder.

55. Bell A rings every 20 minutes, Bell B rings every 30 minutes and Bell C rings every 40 minutes. After how many hours will all the three bells ring at the same time

56. The area of a square carpet is  $1.44\text{m}^2$ . Find the length of each of its one side?

57. Find the sum of the third composite number and  $13^{\text{th}}$  Triangular number.

58. Find the next two numbers in the sequence.

$$\frac{1}{9}, \frac{1}{6}, \frac{1}{3}, \text{---}, \text{---}$$

59. Two consecutive numbers are  $(4y - 1)$  and  $(y + 9)$   
(i) Find the value of  $y$ .

(ii) Find the numbers

60. List all factors of 24.