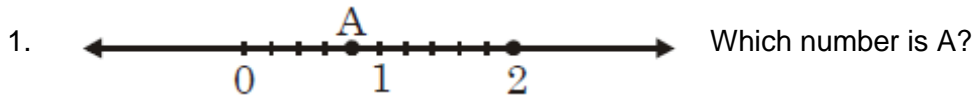


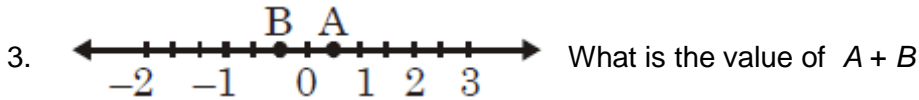
# JSUNIL TUTORIAL, SAMASTIPUR

## 8TH MATHS 1st SUMMATIVE TEST - 3

### SECTION → A ( 2 marks)



2. What is the reciprocal of  $8x\frac{3}{2}$ .



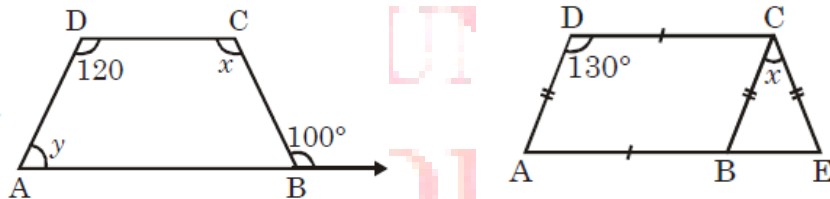
4. Complete it  $\frac{x+2}{x-2} = 1 + \frac{\text{---}}{x-2}$

5. Sum of two numbers is 30. If one number is twice the other, form an equation for finding the numbers.

6. If father is twice as old as his son and also 29 years older than his son. What is the age of father?

7.  $ABCD$  is a quadrilateral in which  $AB \parallel CD$ . Find  $x$  and  $y$ .

8. In Fig. what is the value of  $x$  if  $ABCD$  is a parallelogram and  $CBE$  is an isosceles triangle.



9. In a parallelogram  $ABCD$ ,  $\angle B = 2 < C$ . What is the degree measure of  $\angle B$  and  $\angle C$ .

10. Without adding, find the sum:  $1+3+5+7+9$ .

### SECTION → B ( 3 marks)

11. Find the least number which must be subtracted from 45156 to make it a perfect square.

12. The sides of a cube are doubled. Find the ratio between the volume of the first cube and the new cube.

13. A certain sum invested at 10% per annum compounded semi-annually amounts to Rs. 8820 at the end of one-year. Find the sum.

14. Find the sum  $5 + 7 + 9 + 11 + 13 + 15 + 17 + 19 + 21$

15. Two squares of sides 11 cm. and 9 cm are joined together to form a toy. What is the perimeter of the toy ?

16. What is the least number of four digits which is a perfect square?

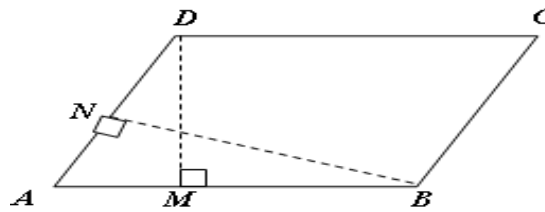
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## 8TH MATHS 1st SUMMATIVE TEST - 3

17. If  $x - y = 7$ ,  $xy = 9$  Find the value of  $x^2 + y^2$  Or, If  $x + y = 12$ ,  $xy = 27$  Find the value of  $x^3 + y^3$
18. The perimeter of a triangle is  $6p^2 - 4p + 9$  and two of its adjacent side are  $p^2 - 2p + 1$  and  $3p^2 - 5p + 3$ . Find third side of triangle.
19. The sum of three consecutive multiples of 8 is 888. Find the multiple.
20. Find any ten rational numbers between  $-5/6$  and  $5/8$

### SECTION → C (6 marks)

21. In parallelogram ABCD, AB = 10cm. The altitudes corresponding to the sides AB and AD are respectively 7cm and 8cm. Find AD



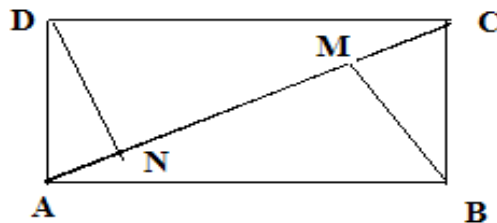
22. Simplify  $\left[ 5^2 \left( 8^{\frac{1}{3}} + 27^{\frac{1}{3}} \right)^3 \right]^{\frac{1}{5}}$

23. Simplify  $\left(\frac{x^m}{x^n}\right)^{m+n} \cdot \left(\frac{x^n}{x^l}\right)^{n+l} \cdot \left(\frac{x^l}{x^m}\right)^{l+m}$

24. Find the value of "a" and "b" so that  $x^4 + x^3 + 8x^2 + ax + b$  is divisible by  $(x^2 + 1)$

OR,

In given figure, ABCD is a rectangle. If BM and DN are perpendicular from B and D on AC Prove that  $\triangle BMC \cong \triangle DNA$



25. : (i) Factorize  $x^4 + y^4 + x^2y^2$  (ii) If  $27^x = \frac{9}{3^x}$  find the value of x.

Or, A reduction in price of sugar enable Farhan to buy extra 5 kg for Rs. 320. Find (i) The original price per kg (ii) The reduced rate per kg