

15. What will be the condition when the digits in the number Change their places?

- a) $(10x + y) + 27 = (10y + x)$
- b) $(10x + y) - 27 = (10y + x)$
- c) $(10x + y) + 27 = (10x + y)$
- d) $(10x + y) - 27 = (10x + y)$

16. What will be value of unit place?

- a) $\frac{5}{3}$
- b) 3
- c) 4
- d) 6

Answer to the questions no. (17 – 18) on the basis of the information given below: The difference of the squares of two positive whole numbers is 11 and the product of the numbers is 30.

17. What are the numbers?

- a) 1 and 30
- b) 2 and 15
- c) 5 and 6
- d) 5 and – 6

18. What is the sum of the squares of the numbers?

- a) 31
- b) 42
- c) 51
- d) 61

19. If the difference of squares of two numbers is 144 and their product is 65 then what are these two numbers?

- a) 6, 5
- b) 12, 5
- c) 13, 5
- d) 12, 13

20. The length of a rectangle is ten metres less than the twice of its breadth. If the breadth is x metre then what is the length?

- a) $2x - 10$
- b) $2x + 10$
- c) $x - 10$
- d) $x + 10$

21. The length of a rectangular region is 23 metres more than the twice of its breadth. If breadth is x metres then what is the length?

- a) $2x - 23$
- b) $2x + 23$
- c) $x + 23$
- d) $x - 23$

22. The length of a diagonal of a rectangular region is 10 metres. If the length and breadth of that rectangular region are x and y metres then which is the value of $x^2 + y^2$?

- a) 10
- b) 20
- c) 100
- d) 200

23. If the sum of squares of two numbers is 170 and their product is 77 then the difference of the squares of these two numbers is –

- a) 70
- b) 72
- c) 78
- d) 82

24. If the sum of squares of two numbers is 181 and the product of the numbers is 90 then what is the square of sum of two numbers?

- a) 271
- b) 361
- c) 400
- d) 625

25. What is the sum of the squares of the numbers for the difference of the squares of two positive whole numbers is 9 and the product of the numbers is 20?

- a) 1
- b) 5
- c) 4
- d) 41

26. If the length of one side of a square is x then what is the difference between the length of diagonal and its one side?

- a) $(1 - \sqrt{2})x$
- b) $(\sqrt{2} - 1)x$
- c) x
- d) $\sqrt{2}x$

27. The length of a square garden is equal to the diagonal of a rectangular garden. If the length and breadth of the rectangular garden are x and y respectively then what is the area of square garden?

- a) Xy
- b) $2(x + y)$
- c) $x^2 + y^2$
- d) $\sqrt{x^2 + y^2}$

28. The sum of squares of two positive numbers is 250. If the product of the numbers is 117 then which of the following are two numbers?

- a) 9, 13
- b) 25, 10
- c) 15, 5
- d) 3, 39

29. What are the numbers for the difference of the squares of two positive whole numbers is 11 and the product of the numbers is 30?

- a) 1 and 30
- b) 2 and 15
- c) 5 and 6
- d) 5 and – 6