



Linear Equation in One Variable

Practice Exercise

- Linear equation in one variable has
 - only one variable with any power
 - only one term with a variable
 - only one variable with power 1
 - only constant term
- A linear equation in one variable has
 - only one solution
 - two solutions
 - more than two solutions
 - no solution
- If $8x - 3 = 25 + 17x$, then x is a/an
 - fraction
 - integer
 - rational number
 - Cannot be solved
- The value of x , for which the expressions $3x - 4$ and $2x + 1$ become equal, is
 - 3
 - 0
 - 5
 - 1
- On subtracting 8 from x , the result is 2. The value of x is
 - 10
 - 11
 - 9
 - 8
- If $\frac{x}{2} - \frac{1}{5} = \frac{x}{3} + \frac{1}{4}$, then the value of x is
 - 29/10
 - 27/10
 - 23/10
 - None of these
- If $x = \frac{4}{5}(x + 10)$, find the value of x .
 - 39
 - 40
 - 41
 - None of these
- If $\frac{0.2x + 5}{3.5x - 3} = \frac{2}{5}$, then find the value of x .
 - 29/6
 - 31/6
 - 23/6
 - None of these
- If $\frac{5x}{3} - 4 = \frac{2x}{5}$, then the numerical value of $2x - 7$ is
 - $\frac{19}{13}$
 - $-\frac{13}{19}$
 - 0
 - $\frac{13}{19}$
- If $\frac{3t - 2}{3} + \frac{2t + 3}{2} = t + \frac{7}{6}$, then find the value of t .
 - $\frac{1}{3}$
 - $\frac{2}{3}$
 - $\frac{1}{5}$
 - $\frac{1}{7}$
- If the sum of the two numbers is 11 and their product is 30, then the numbers are
 - 8, 3
 - 9, 2
 - 7, 4
 - 6, 5

12. If one number is thrice the other and their sum is 20, then the numbers are
 (a) 5, 15 (b) 4, 12
 (c) 3, 9 (d) None of these
13. One of the angle of a triangle is equal to the sum of the other two angles. If the ratio of the other two angles is 4 : 5, then the angles of triangle are
 (a) 90° , 40° , 50° (b) 15° , 60° , 105°
 (c) 30° , 60° , 90° (d) 30° , 40° , 110°
14. The ages of two persons differ by 20 yr. If 5 yr ago, the elder one is 5 times as old as the younger one, their present ages are
 (a) 50 yr, 30 yr (b) 28 yr, 5 yr
 (c) 20 yr, 10 yr (d) 30 yr, 10 yr
15. The sum of the ages of a father and son is 45 yr. Five years ago, the product of their ages was 4 times the father's age at that time. The present ages of the father and son respectively are
 (a) 25 yr, 10 yr (b) 36 yr, 9 yr
 (c) 39 yr, 6 yr (d) None of these
16. The sum of three consecutive multiples of 7 is 357. Find the smallest multiple.
 (a) 112 (b) 126
 (c) 119 (d) 116
17. Two numbers differ by 40. When each number is increased by 8, the bigger becomes thrice the lesser number. If one number is x , then the other number is $(40 - x)$.
 (a) 5 (b) 6
 (c) 7 (d) 8
18. Half of herd of deer are grazing in the field and three-fourth of the remaining are playing nearby. The rest 9 are drinking water from the pond. Find the number of deer in the herd.
 (a) 70 (b) 72
 (c) 73 (d) 74
19. Sum of the digits of a two-digit number is 9. When we interchange the digits, it is found that the resulting new number is greater than the original number by 27. What is the two-digits number?
 (a) 35 (b) 36 (c) 37 (d) 38
20. In a class, $\frac{3}{5}$ of the students are girls and rest are boys. If $\frac{2}{9}$ of the girls and $\frac{1}{4}$ of the boys are absent. What part of the total number of students are present?
 (a) $\frac{23}{30}$ (b) $\frac{23}{36}$
 (c) $\frac{18}{49}$ (d) $\frac{17}{25}$
21. Baichung's father is 26 yr younger than Baichung's grandfather and 29 yr older than Baichung. The sum of the ages of all the three is 135 yr. What is the age of each one of them?
 (a) 18 yr, 46 yr, 72 yr (b) 17 yr, 46 yr, 72 yr
 (c) 17 yr, 46 yr, 75 yr (d) None of these
22. Lakshmi is a cashier in a bank. She has currency notes of denominations ₹ 100, ₹ 50 and ₹ 10, respectively. The ratio of the number of these notes is 2 : 3 : 5. The total cash with Lakshmi is ₹ 400000. How many notes of each denomination does she have?
 (a) 2000, 3000, 5000 (b) 1500, 3000, 4500
 (c) 2000, 3000, 4000 (d) None of these
23. The base of an isosceles triangle is $\frac{4}{3}$ cm. The perimeter of the triangle is $4\frac{2}{15}$ cm. What is the length of the remaining equal sides?
 (a) $1\frac{2}{5}$ (b) $2\frac{2}{5}$
 (c) $3\frac{2}{5}$ (d) None of these
24. A steamer goes downstream from one point to another in 7 h. It covers the same distance upstream in 8 h. If the speed of stream is 2 km/h, find the speed of the steamer in still water and the distance between the ports.
 (a) 30 km/h, 224 km/h
 (b) 40 km/h, 225 km/h
 (c) 32 km/h, 228 km/h
 (d) None of these