



INDIAN SCHOOL AL WADI AL KABIR

Class VIII

LINEAR EQUATIONS WITH ONE VARIABLE

Worksheet - 4

OBJECTIVE TYPE (1 Mark)

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|-------------|---|-------------------|----------|----------------|----------|-------------------------|----------|-------------|
| Q.1. | The digits in the tens place of a two-digit number is 3 more than the digits in the unit place. If the digit at unit place is b , the number is | | | | | | | |
| | A | $11b + 30$ | B | $10b + 30$ | C | $11b + 3$ | D | $10b + 3$ |
| Q.2. | A linear equation in one variable has | | | | | | | |
| | A | Only one solution | B | Two solutions | C | More than two solutions | D | No solution |
| Q.3. | Value of s in $\frac{1}{3} + s = \frac{2}{5}$ | | | | | | | |
| | A | $\frac{4}{5}$ | B | $\frac{1}{15}$ | C | $\frac{5}{10}$ | D | 0 |
| Q.4. | 9 is subtracted from the product of p and 4, the result is 11. The value of p is | | | | | | | |
| | A | 1 | B | 2 | C | 5 | D | 4 |
| Q.5. | The sum of two consecutive numbers is 15. The numbers are..... | | | | | | | |
| | A | 6,9 | B | 7,8 | C | 10,5 | D | 11,4 |
| Q.6. | Ram is 8 years now. He is 5 years elder than his brother Gopal. Gopal's age after 7 years will be... | | | | | | | |
| | A | 12 years | B | 10 years | C | 15 years | D | 13 years |
| Q.7. | The perimeter of an equilateral triangle is 36 cm. Find its side. | | | | | | | |
| | A | 6cm | B | 12cm | C | 24cm | D | 18cm |
| Q.8. | The sum of two numbers is 50 and their difference is 22. The numbers are..... | | | | | | | |
| | A | 27,23 | B | 26,24 | C | 11,39 | D | 36,14 |
| Q.9. | Three years ago, Mini's age was 15 years. Find her present age. | | | | | | | |
| | A | 18 years | B | 12 years | C | 20 years | D | 10 years |
| Q.10 | The length of a rectangle is 6cm more than three times its breadth. The perimeter is 132 cm. Its length is | | | | | | | |
| | A | 60cm | B | 50cm | C | 51 cm | D | 36 cm |

FILL IN THE BLANKS

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| Q.11 | In a linear equation, the power of the variable appearing in the equation is one. |
| Q.12 | The solution of the equation $3x - 4 = 11$ is |
| Q.13 | $\frac{x}{5} + 30 = 18$ has the solution as |
| Q.14 | The value of x Which makes the equation a true statement is called of the equation. |
| Q.15 | The solution of $2x - 3 = 7$ is |

SECTION B (2 Marks)

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| Q.16 | One of the angles of a triangle is equal to the sum of the other two angles. If the ratio of the other two angles is 4:5, find the angles of the triangle. |
| Q.17 | The sum of three consecutive multiple of 9 is 999. What are the numbers? |
| Q.18 | Solve : $\frac{2x+5}{6} - \left(\frac{1}{4}\right) = \frac{2x-7}{12}$ |
| Q.19 | The numerator of a rational number is 7 less than the denominator. If the denominator is increased by 9 and numerator by 2, we get $\frac{3}{5}$. Find the rational number. |
| Q.20 | Find the three consecutive even numbers, whose sum exceeds the smallest of them by 234. |

SECTION C (4 Marks)

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| State True and False | |
| Q.21 | <p>a) Both sides of an equation can be multiplied by same number without changing the equality of the two sides.</p> <p>b) The solution of $7x + 11 = 25$ is $x = 3$</p> <p>c) $2x^3 + \frac{1}{5} = 25$ is a linear equation.</p> <p>d) Anita's mothers age is 34 years. It is 4 more than 3 times her age. This can be represented as $3x + 4 = 34$</p> |
| Q.22 | 100 students contributed for a party. Some contributed Rs 15 each and the others Rs 25 each. If the total amount collected was Rs 2100, how many contributed Rs 15 each? |
| Q.23 | There are benches in class room. If 4 students sit on each bench, three benches are left vacant; and if 3 students sit on each bench, 3students are left standing. What is the total number of students in the class? |
| Q.24 | The ratio between the ages of Mohan and Ram are in the ratio 7:9. Nine years ago, their ages were in the ratio 2:3. Find their present ages. |

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| Q.25 | A number consists of 2 digits whose sum is 7. If 45 is added to the number, the digits are reversed. Find the number. | | | | | | | |
| | ANSWERS | | | | | | | |
| Answers | Q.1 | A)11b+30 | Q.2 | A) Only one solution | Q.3. | B) $\frac{1}{15}$ | Q.4 | C)5 |
| | Q.5 | B) 7,8 | Q.6 | B)10 years | Q.7 | B) 12cm | Q.8 | D)36,14 |
| | Q.9 | A) 18 years | Q.10 | C) 51 cm | Q.11 | highest | Q.12 | 5 |
| | Q.13 | -60 | Q.14 | <i>solution</i> | Q.15 | $x = 5$ | Q.16 | 40,50,90 |
| | Q.17 | 324,333,342 | Q.18 | (-7) | Q.19 | $\frac{19}{26}$ | Q.20 | 114,116,118 |
| | Q.21 | a) True b) False c) False d) True | Q.22 | X=40 | Q.23 | X=48students | Q.24 | 21years, 27 years |
| | Q.25 | 16 | | | | | | |
