



INDIAN SCHOOL AL WADI AL KABIR

Class VIII, Mathematics (2023-24)

Worksheet DTQ – LINEAR EQUATIONS IN ONE VARIABLE

SHORT ANSWER TYPE QUESTIONS- 7 QUESTIONS. (2 Marks each)

Q1. Solve: $\frac{x}{2} + \frac{x}{4} + \frac{x}{5} + 10000 = x$.

Q2. If $\frac{5x}{3} - 4 = \frac{2x}{5}$, then find the numerical value of $19x - 7$.

Q3. The sum of three consecutive multiples of 7 is 357. Find the smallest multiple.

Q4. If $\frac{2}{5}x - 2 = 5 - \frac{3}{5}x + \frac{1}{2}$ then find x .

Q5. The perimeter of a rectangular painting is 510 cm. If the ratio of length and breadth is 8:7, find the length and breadth of the rectangular painting. (COMPETENCY FOCUSED PRACTICE QUESTIONS)

Q6. Find the solution of the equation $2y - 3 = 5y - \frac{18}{5}$.

Q7. The sum of two numbers is 92. Their difference is 18. Find the numbers.

SHORT ANSWER TYPE- 5 QUESTIONS. (3 Marks each)

Q8. The present age of father is five times the age of his son. After 8 years, age of father will become three times the age of his son. Find their present ages.

Q9. Solve: $4(3p + 2) - 5(6p - 1) = 2(p - 8) - 6(7p - 4)$

Q10. Two equal sides of a triangle are each 4 m less than three times the third side. Find the dimensions of the triangle, if its perimeter is 55 m.(COMPETENCY FOCUSED PRACTICE QUESTIONS)

Q11. Solve: $x + \frac{2}{3}x + \frac{x}{7} = 97 - \frac{x}{2}$

Q12. Kaustubh had 60 flowers. He offered some flowers to his friend and found that the ratio of the number of remaining flowers to that of flowers in the beginning is 3:5. Find the number of flowers offered by him to his friend. (COMPETENCY FOCUSED PRACTICE QUESTIONS)

LONG ANSWER TYPE- 3 QUESTIONS. (4 Marks each)

Q.13	Solve: $\frac{2y-3}{4} - \frac{3y-5}{2} = y + \frac{3}{4}$.
Q14.	Sum of the digits of a two-digit number is 11. The given number is less than the number obtained by interchanging the digits by 9. Find the number. (COMPETENCY FOCUSED PRACTICE QUESTIONS)
Q15.	Solve: $\frac{y}{2} - \frac{1}{4}\left(y - \frac{1}{3}\right) = \frac{1}{6}(y + 1) + \frac{1}{12}$.

ANSWERS

Q1.	2,00,000	Q2.	53	Q3.	112
Q4.	$\frac{15}{2}$	Q5.	136cm, 119cm	Q6.	$\frac{1}{5}$
Q7.	37 and 55	Q8.	8,40	Q9.	$\frac{-5}{22}$
Q10.	23m, 23m, 9m	Q11.	42	Q12.	24
Q13.	$\frac{1}{2}$	Q14.	65,56	Q15.	2