



# INDIAN SCHOOL AL WADI AL KABIR

**Class VIII**, Mathematics

## Linear Equations– Worksheet (DTQ)

25-08-2021

### Descriptive Questions-Short Answer Type (2 marks each)

**Q1.** Solve:  $\frac{5x-4}{8} - \frac{x-3}{5} = \frac{x+6}{4}$

**Q2.** Find the value of  $y$ , if  $\frac{y}{2y+6} = \frac{3}{8}$

**Q3.** Solve:  $\frac{m}{2} - \frac{5m}{4} + \frac{7m}{6} = 25$

### Descriptive Questions- Long Answer Type 1 (3 marks each)

**Q4.** The sum of three consecutive multiples of 6 is 162. Find the multiples.

**Q5.** The sum of two numbers is 78. Their difference is 18. Find the numbers.

**Q6.** Solve:  $5x - 2(2x - 7) = 2(3x - 1) + \frac{7}{2}$

**Q7.** A grand mother is fifteen times older than her granddaughter. She is also 70 years older than her. Find their present ages.

**Q8.** The perimeter of a rectangle is 320cm. If the ratio of length and breadth is 5:3, find the length and breadth of the rectangle.

**Q9.** Solve the equation:  
 $4(3w + 2) - 5(6w - 1) = 2(w - 8) - 6(7w - 4) + 4w$

**Q10.** Twenty-five years from now, I will be  $\frac{3}{2}$  times of my present age. What will be my age after twenty-five years?

**Q11.** Present ages of Sam and Ram are in the ratio 8:9. Five years from now the ratio of their ages will be 9:10. Find their present ages.

### Descriptive Questions Long Answer Type 2 (4 marks each)

**Q12.** The sum of ₹9000 is in the form of denominations of ₹100 and ₹500. If the total number of notes is 50, find the number of notes of each type.

**Q13.** Amul has ₹780 in the denominations of ₹100, ₹50, and ₹10. The number of notes is in the ratio 5:4:8. Find the number of notes of each kind.

**Q14.** The numerator of a fraction is 4 less than the denominator. If 1 is added to both its numerator and denominator, it becomes  $\frac{1}{2}$ . Find the fraction.

**Q15.** The digits of a two-digit number differ by 3. If digits are interchanged and the resulting number is added to the original number, we get 121. Find the original number.

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ANSWERS

<b>Answers</b>	<b>1.</b>	$x = 8$	<b>2</b>	$y = 9$	<b>3</b>	$m = 60$	<b>4</b>	The multiples are 48, 54, 60
	<b>5</b>	The numbers are 30 and 48	<b>6</b>	$x = \frac{5}{2}$	<b>7</b>	Age of granddaughter = 5yrs Age of grandmother = 75 yrs	<b>8</b>	Length = 100cm and breadth = 60cm
	<b>9</b>	$w = \frac{-5}{18}$	<b>10</b>	75 years	<b>11</b>	40,45	<b>12</b>	No. of ₹100 notes = 40 No. of ₹500 notes = 10
	<b>13</b>	No. of ₹10 notes = 5 No. of ₹50 notes = 4 No. of ₹10 notes = 8	<b>14</b>	$\frac{3}{7}$	<b>15</b>	The original number can be 47 or 74		