

**BHARATIYA VIDYA BHAVAN'S V.M.PUBLIC SCHOOL
VADODARA**

Date:	Worksheet-Linear Equation in One Variable	Subject: Mathematics
Class: VIII	Name of the student:	

- 1) The sum of two numbers is 20, if one is three-seventh of the other, determine the numbers.
- 2) The difference of two numbers is $\frac{3}{5}$, if one is one-fourth of the other .Determine the numbers.
- 3) The sum of two numbers is 240. If 65% of one number is equal to 85% of the other, find the numbers.
- 4) The numerator of a rational number is less than denominator by 2. If 1 is added to both the numerator and denominator, the number obtained is $\frac{2}{3}$.Find the rational number.
- 5) The width of a rectangle is $\frac{2}{3}$ of its length. If the perimeter of the rectangle is 135cm, find the dimensions of the rectangle.
- 6) Vijay is older than his sister Seema by 12 years. Four years ago, Vijay was four times as old as his sister. Find their present ages.
- 7) Devansh has a total of Rupees 590 as currency notes in the denominations of Rs 50, Rs20 and Rs10. The ratio of number of Rs 50 and Rs.20 notes is 3:5. If she has a total of 25 notes, how many notes of each denomination she has?
- 8) The distance between two stations is 375km. Two trains moving with different speeds, start simultaneously from these stations on parallel tracks to cross each other. The distance between the trains after two hours of their start is 85 km. The speed of one of the train is 5km/hr greater than the other, find the speed of each train.
- 9) One-third of the herds of cows are grazing in the field, 20 less than half of them are near the river. The remaining 35 are tied with the trees. Find the total number of cows in the herd
- 10) Divide 3000 in two parts such that 5% of first part is equal to 10% of the second.
- 11) Solve:
 - i) $3x + 13 = 2x - 11$
 - ii) $x + 4(x - 2) = 3(x - 9)$
 - iii) $\frac{x}{6} + 2 = \frac{1}{18}$
 - iv) $\frac{6x+1}{2} = \frac{7x-3}{3}$
 - v) $\frac{7-x}{7+x} = \frac{2}{7}$
 - vi) $1.2x - 4.4 = 0.7(2x - 5)$