

SUBJECT –MATHEMATICS
CLASS-VIII
CHAPTER-9 (LINEAR EQUATIONS IN ONE VARIABLE)
WORKSHEET (HOTS)

1. If $\frac{5x}{3} - 4 = \frac{2x}{5}$ then what is the numerical value of $(3x+2)$.
2. Divide 243 into three parts such that half of the first part , one-third of the second part and one-fourth of the third part are all equal.
3. A purse has only two-rupee and five-rupee coins. The sum of the coins is 36 and the total value of the coins is Rs.84. Find the number of five-rupee coins.
4. A number is 6 more than the average of , its half, its one-third and its one-sixth. Find the number.
5. Solve for x. $\frac{x^2 - 3x - 28}{x^2 - 49} = \frac{3}{17}, x \neq \pm 7$
6. If a scooterist drives at the rate of 24km/hr from his home, he reaches his work place 5 minutes late. But if he drives at the rate of 30km/hr, he reaches his work place 4 minutes early. Find the distance of his work place from his home.
7. A purse has only one-rupee and two-rupee coins in it. The number of two-rupee coins is one-third the number of one-rupee coins. If the purse has Rs. 115, find the number of two-rupee coins.
8. Solve $\frac{(1-2x)}{7} - \frac{(2-3x)}{8} = \frac{3}{2} + \frac{x}{4}$
9. A number is 56 greater than the average of its third, quarter and one-twelfth. Find it.
10. Solve : $\frac{x+b}{a-b} = \frac{x-b}{a+b}$