

VIII - Mathematics Assignment No-04 - Linear Eq. in one Variable

Solve the following Equations for the unknown Variable (x, y, z, t etc)

Q1. $\frac{x}{2} + \frac{2x}{3} + \frac{3x}{4} = \frac{5}{6}$

Q2. $5 - \left(x - \frac{1}{2}\right) + \frac{5}{6} = \frac{3x}{12}$

Q3. $\frac{x+5}{6} - \frac{3-x}{2} = \frac{5x-2}{12}$

Q4. $3 + \frac{y-5}{2} + \frac{2y}{3} = y$

Q5. $3z + \frac{1}{2} = \frac{3}{8} + \frac{z}{4}$

Q6. $\frac{2}{3}(4t-1) - \left(4t - \frac{1-3t}{2}\right) = \frac{t-7}{2}$

Q7. $\frac{4z+3}{4} - \left(x - \frac{2z-1}{3}\right) = z + \frac{1}{3}$

Q8. $\frac{2t-3}{2} + \left(2t + \frac{3t-1}{4}\right) = \frac{1}{8}$

Q9. $6 - 3(x-1) = 10 + 2(5-2x)$, also verify the answer

Q10. $25(z-3) + 75 = 50(2x-5)$, Verify the answer also.

ANSWER:-

(Q1) $x = \frac{10}{23}$	(Q4) $y = -3$	(Q7) $z = \frac{1}{4}$	(Q10) $z = \frac{10}{3}$
(Q2) $x = \frac{76}{15}$	(Q5) $z = \frac{1}{2}$	(Q8) $t = \frac{1}{2}$	
(Q3) $x = \frac{1}{2}$	(Q6) $t = 1$	(Q9) $x = 11/5$	