



Multiple choice questions

1. A system of three linear equations in three variables is inconsistent if their plane
 - (1) intersect only at a point
 - (2) intersect in a line
 - (3) coincides with each other
 - (4) do not intersect
2. The solution of the system $x + y - 3z = -6$, $-7y + 7z = 7$, $3z = 9$ is
 - (1) $x = 1, y = 2, z = 3$
 - (2) $x = -1, y = 2, z = 3$
 - (3) $x = -1, y = -2, z = 3$
 - (4) $x = 1, y = 2, z = 3$
3. If $(x - 6)$ is the HCF of $x^2 - 2x - 24$ and $x^2 - kx - 6$ then the value of k is
 - (1) 3
 - (2) 5
 - (3) 6
 - (4) 8
4. $\frac{3y - 3}{y} \div \frac{7y - 7}{3y^2}$ is
 - (1) $\frac{9y}{7}$
 - (2) $\frac{9y^3}{(21y - 21)}$
 - (3) $\frac{21y^2 - 42y + 21}{3y^3}$
 - (4) $\frac{7(y^2 - 2y + 1)}{y^2}$