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(Affiliated to CBSE up to +2 Level)

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SUB.: MATHEMATICS

Do Your Self

1. A pair of linear equations $a_1x + b_1y + c_1 = 0$; $a_2x + b_2y + c_2 = 0$ is said to be inconsistent, if

(a) $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ (b) $\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$

(c) $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$ (d) $\frac{a_1}{a_2} \neq \frac{c_1}{c_2}$

2. Graphically, the pair of equations $7x - y = 5$; $21x - 3y = 10$ represents two lines which are

- (a) intersecting at one-point (b) parallel
(c) intersecting at two points (d) coincident

3. The pair of equations $3x - 5y = 7$ and $-6x + 10y = 7$ have

- (a) a unique solution (b) infinitely many solutions
(c) no solution (d) two solutions

4. If a pair of linear equations is consistent, then the lines will be

- (a) always coincident (b) parallel
(c) always intersecting (d) intersecting or coincident

5. The pair of equations $x = 0$ and $x = 5$ has

- (a) no solution (b) unique/one solution
(c) two solutions (d) infinitely many solutions

6. The pair of equation $x = -4$ and $y = -5$ graphically represents lines which are

- (a) intersecting at $(-5, -4)$ (b) intersecting at $(-4, -5)$
(c) intersecting at $(5, 4)$ (d) intersecting at $(4, 5)$

7. For what value of k, do the equations $2x - 3y + 10 = 0$ and $3x + ky + 15 = 0$ represent coincident lines

- (a) $\left(\frac{-9}{2}\right)$ (b) -11
(c) $\frac{9}{2}$ (d) -7

8. If the lines given by $2x + ky = 1$ and $3x - 5y = 7$ are parallel, then the value of k is

- (a) $\frac{-10}{3}$ (b) $\frac{10}{3}$
(c) -13 (d) -7

9. One equation of a pair of dependent linear equations is $2x + 5y = 3$. The second equation will be

- (a) $2x + 5y = 6$ (b) $3x + 5y = 3$
(c) $-10x - 25y + 15 = 0$ (d) $10x + 25y = 15$

10. If $x = a$, $y = b$ is the solution of the equations $x + y = 5$ and $2x - 3y = 4$, then the values of a and b are respectively

- (a) 6, -1 (b) 2, 3 (c) 1, 4 (d) 19/5, 6/