



Consider the lines given by

$$L_1: x + 3y - 5 = 0$$

$$L_2: 3x - ky - 1 = 0$$

$$L_3: 5x + 2y - 12 = 0$$

Solution:

(C) L_1, L_2, L_3 form triangle, if
neither they are concurrent nor
parallel

$$\Rightarrow k \neq 5, -9, -\frac{6}{5} \quad (C) \rightarrow (r)$$

(D) L_1, L_2, L_3 do not form a
triangle, if they are parallel or
concurrent

$$\Rightarrow k = 5 \text{ or } -9 \text{ or } -\frac{6}{5} \quad (D) \rightarrow (p), (q), (s)$$

COLUMN I	COLUMN II
(A) L_1, L_2, L_3 are concurrent, if	(p) $k = -9$
(B) One of L_1, L_2, L_3 is parallel to at least one of the other two, if	(q) $k = -\frac{6}{5}$
(C) L_1, L_2, L_3 form a triangle, if	(r) $k = \frac{5}{6}$
(D) L_1, L_2, L_3 do not form a triangle, if	(s) $k = 5$