Homework 5/2

05 February 2020 13:09

Question 7

(Suggested maximum time: 15 minutes)

The equations of each of the lines l, m, n, o, p and q are given in the tables below.

Line	Equation
1	y = 2x - 3
m	y = 3x + 5

Line	Equation
n	y = x + 1
О	y = 4x + 1

Line	Equation
p	y = 2x
q	x + 3y - 3 = 0

(a) Complete the following sentences. Write one of the letters l, m, n, o, p and q in each box.

(i) Line has the greatest slope.

(ii) Line has a negative slope.

(iii) Lines and are perpendicular to each other.

(iv) Lines and cross the y-axis at the same point.

(v) A translation can be used to map line onto line

(vi) Line passes through the origin.

(b) The line k passes through the point (0, 2) and is perpendicular to the line l. Find the equation of the line k in the form ax + by + c = 0.



(c) Use algebra to find the point of intersection of the lines k and l.

