Name: _____ ( ) Class: ____ Date: _____ Marks: ____/10 Time: 10 minutes

Section Quiz 15.1

1. In each of the following, find the equation of the straight line satisfying the given conditions.

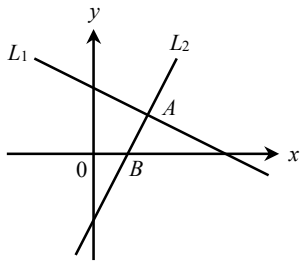
(a) A vertical straight line passes through (2, 6). (1 mark)

(b) A straight line passes through (–1, –3) and is parallel to the x-axis. (1 mark)

2. L_1 is a straight line with y-intercept 9 and perpendicular to a straight line L_2. L_1 and L_2 intersect at $A(8, 5)$.

(a) Find the equations of L_1 and L_2. (6 marks)

(b) If L_2 cuts the x-axis at B, find the coordinates of B. (2 marks)



Name: _____ ( ) Class: ____ Date: _____ Marks: ____/8 Time: 10 minutes

Section Quiz 15.2

A straight line L: $2x - 3y - 12 = 0$ cuts the x-axis and the y-axis at P and Q respectively.

(a) Find the slope, the x-intercept and the y-intercept of L. (3 marks)

(b) Find the coordinates of the mid-point M of PQ. (2 marks)

(c) Find the equation of the straight line passing through M with x-intercept –5 in the general form. (3 marks)

Name: _____ ( ) Class: ____ Date: _____ Marks: ____/12 Time: 10 minutes

Section Quiz 15.3

1. Find the number of points of intersection of L_1: $y = 3x + 11$ and L_2: $6x - 2y + 11 = 0$. (3 marks)

2. Two straight lines L_1: $4x - y + 7 = 0$ and L_2: $5x + 2y - 1 = 0$ intersect at a point A.

(a) Find the coordinates of A. (3 marks)

(b) If the straight line L_3: $3x - 4y + k = 0$ passes through A, find the value of k. (2 marks)

(c) Find the equation of a straight line L_4 passing through A and perpendicular to the line L_3 in the general form. (4 marks)