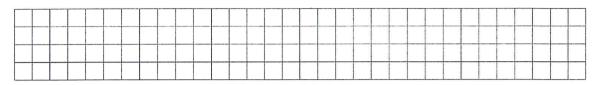
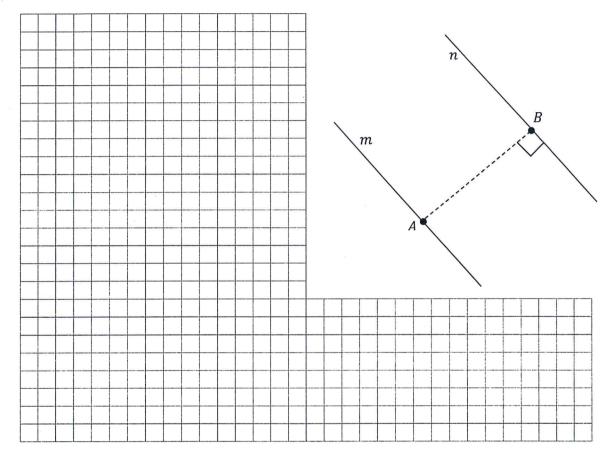
Question 5 (25 marks)

The line m: 2x + 3y + 1 = 0 is parallel to the line n: 2x + 3y - 51 = 0.

(a) Verify that A(-2, 1) is on m.



(b) Find the coordinates of B, the point on the line n closest to A, as shown below.



(c) Two touching circles, s and t, are shown in the diagram. m is a tangent to s at A and n is a tangent to t at B. The ratio of the radius of s to the radius of t is 1 : 3.
Find the equation of s.

