9 A curve has equation

$$y = \frac{2x^2 - 6}{3x - 6} \qquad x \neq 2$$

(a) Write down an equation of the asymptote to the curve which is parallel to the y-axis.

(1)

(b) Find the coordinates of the stationary points on the curve.

(7)

The curve crosses the y-axis at the point A.

(c) Find an equation of the normal to the curve at A.

(3)

The normal at A meets the curve again at B.

(d) Find the x-coordinate of B.

(4)

Question 9 continued

Question 9 continued

Question 9 continued

(Total for Question 9 is 15 marks)