



The diagram shows part of the curve  $y = 2 - \frac{18}{2x + 3}$ , which crosses the  $x$ -axis at  $A$  and the  $y$ -axis at  $B$ . The normal to the curve at  $A$  crosses the  $y$ -axis at  $C$ .

(i) Show that the equation of the line  $AC$  is  $9x + 4y = 27$ . [6]

(ii) Find the length of  $BC$ . [2]