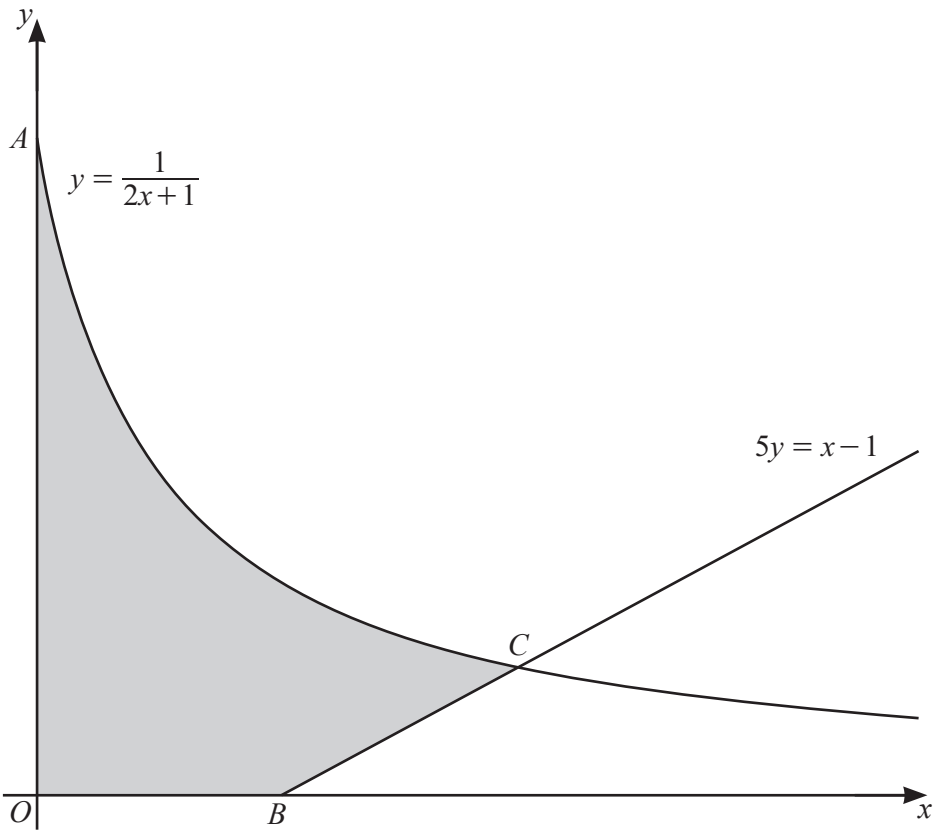
12 DO NOT USE A CALCULATOR IN THIS QUESTION.



The diagram shows part of the curve $y = \frac{1}{2x+1}$ and part of the line $5y = x - 1$.

The curve meets the y-axis at point A. The line meets the x-axis at point B. The line and curve intersect at point C.

(a) (i) Find the coordinates of A and B. [1]

(ii) Verify that the x-coordinate of C is 2. [2]

(b) Find the exact area of the shaded region. [5]

Question 13 is printed on the next page.