

10 Fig. 10 shows the graph of  $y = (k-x)\ln x$  where  $k$  is a constant ( $k > 1$ ).

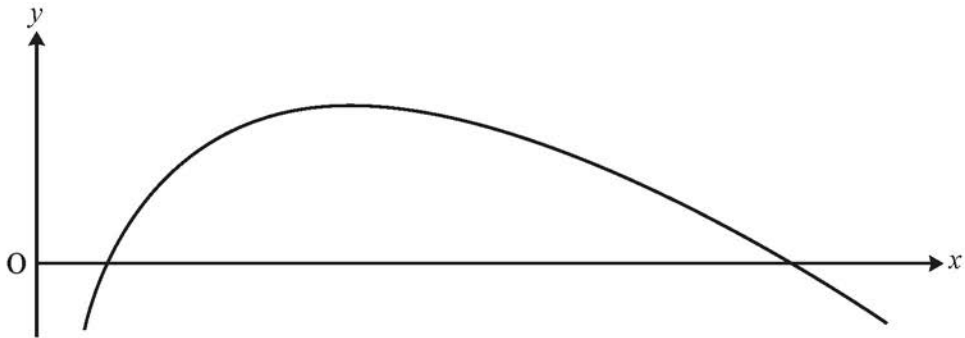


Fig. 10

Find, in terms of  $k$ , the area of the finite region between the curve and the  $x$ -axis.

[8]