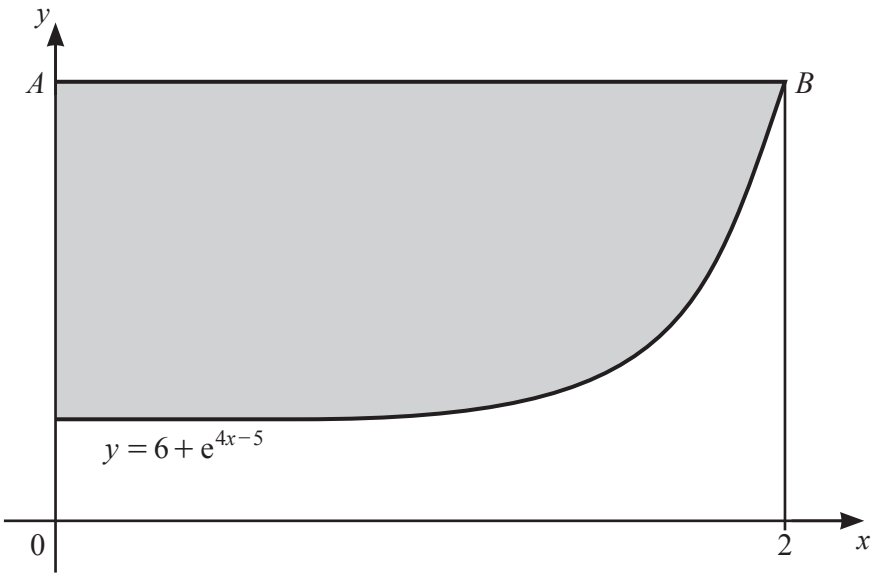
11



The diagram shows part of the graphs of $y = 6 + e^{4x-5}$ and $x = 2$. The line $x = 2$ meets the curve at the point $B(2, b)$ and the line AB is parallel to the x-axis. Find the area of the shaded region. [7]