8 **In this question you must show detailed reasoning.**

Fig. 8 shows the graph of a quadratic function. The graph crosses the axes at the points $(-1, 0)$, $(0, -4)$ and $(2, 0)$.
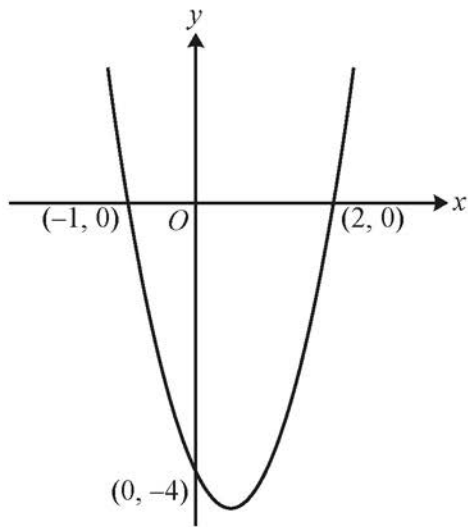

Fig. 8

Find the area of the finite region bounded by the curve and the x-axis. **[8]**