

11 In this question you must show detailed reasoning.

Fig. 11 shows the curve $y = f(x)$, where $f(x)$ is a cubic function. **Fig. 11** also shows the coordinates of the turning points and the points of intersection with the axes.

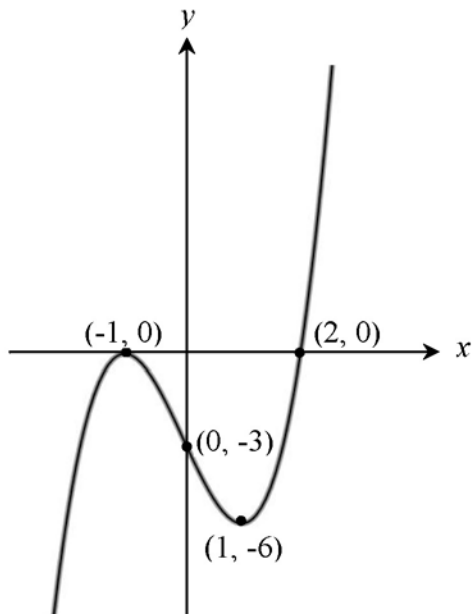


Fig. 11

Show that the tangent to $y = f(x)$ at $x = t$ is parallel to the tangent to $y = f(x)$ at $x = -t$ for all values of t .