

7. (a) Express $-6x^2 + 24x - 25$ in the form $p(x + q)^2 + r$. **3**

(b) Given that $f(x) = -2x^3 + 12x^2 - 25x + 9$,
show that $f(x)$ is strictly decreasing for all $x \in \mathbb{R}$. **3**