

Student Name:

Student ID:

Exercise 1

If $x^3 + y^3 = 16$, find the value of $\frac{d^2y}{dx^2}$ at the point (2, 2).

Exercise 2

Find the two points where the curve $x^2 + xy + y^2 = 4$ crosses the x-axis and show that the tangents to the curve at these points are parallel.