

1992 AB4/BC1

Consider the curve defined by the equation $y + \cos y = x + 1$ for $0 \leq y \leq 2\pi$.

- (a) Find $\frac{dy}{dx}$ in terms of y .
- (b) Write an equation for each vertical tangent to the curve.
- (c) Find $\frac{d^2y}{dx^2}$ in terms of y .