

Quiz
October 10, 2007

Solutions of all problems must be accompanied by relevant explanations.

Problem 1. Find $\frac{dy}{dx}$ if $\sin y = x + y$.

Problem 2. Find the equation of the tangent to the graph of the function $f(x) = x + \sqrt{x}$ at the point $(1, 2)$.

Problem 3. Find equations of all tangents to the ellipse $\frac{x^2}{2} + y^2 = 1$ which pass through the point $(2, 0)$.