

KFUPM
Mathematics & Statistics

Term 161
MATH 101

Date: 30/11/2016
Duration: 22 minutes

Quiz# 4

Name:

ID #:

Section:

1. If $y = x \sin^{-1} x + x \cos^{-1} x$, then $x \frac{dy}{dx} =$

2. The point (x, y) on the curve $y = [\ln(2x + 5)]^2$ with horizontal tangent is:

3. If $f(x) = (1 + 2x)^{(1+3x)}$ then $f'(1) =$

4. Find $\frac{dy}{dx}$ by implicit differentiation:

$$e^y \cos(x) = 1 + \sin(xy)$$