

King Fahd University of Petroleum and Minerals
Department of Math & Stat
Math 132 Section # 1, 5 (092)
Quiz 2(a)

Time: 20 minutes

Marks: _____/9

Name: _____ Section #: _____

ID #: _____ Serial #: _____

1. For $y = x^3 - 3^x$, find y' .

2. A country's saving S in terms of national income I is defined implicitly by the equation

$$S^2 + \frac{1}{4}I^2 = SI + I.$$

Find the marginal propensity to save when $I = 5$ and $S = 1$.

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Quiz 2(b)

Time: 20 minutes

Marks: _____/9

Name: _____ Section #: _____

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1. For $y^2 - 6xy = 54$, find $y' \Big|_{(0,1)}$.

2. If $y = x^3 \log_4 x$, then find $\frac{dy}{dx}$.

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Quiz 2(c)

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1. If $f(x) = 6^{x^2 \ln x}$, then find $f'(1)$.

2. Find equation of the tangent line to the curve $2x^2 + y^3 = 3$ at the point $(1, 1)$.