KFUPM – Department of Mathematics and Statistics – Term 151

**MATH 102**

**QUIZ # 1 Code 1** (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

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**Exercise 1** (4 points)

Let g be a continuous function such that $g(1) = g(2) = 4$ and let $F(x) = \int_x^{2x} tg(t)dt$. Find $F'(1)$

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**Exercise 2** (6 points)

Find the area bounded by the curve $y = \dfrac{\sin x}{1+\cos x}, x = 0$ and $x = \dfrac{\pi}{2}$

KFUPM – Department of Mathematics and Statistics – Term 151

**MATH 102**

**QUIZ # 1 Code 2** (Duration = 20 minutes)

NAME:_____ ID:_____ Section: _____

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**Exercise 1** (6 points)

Find the area bounded by the curve $y = \dfrac{\cos x}{1+\sin x}, x = \pi$ and $x = \dfrac{\pi}{2}$

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**Exercise 2** (4 points)

Let g be a continuous function such that $g(1) = 4$ and let $F(x) = \int_x^{x^2} tg(t)dt$. Find $F'(1)$