KFUPM – Department of Mathematics and Statistics – Term 173 **MATH 101**

QUIZ # 4: Code 1 (Duration = 20 minutes)

NAME:	ID:	Section:
Exercise 1 (5 points)		
Find all points at which the c	$urve\ y = \sinh(x) - 2x\ has\ a\ hor$	rizontal tangent line.

Exercise 2 (5 points) Show that for every x > 0, $\frac{1}{1+x} < \ln(1+\frac{1}{x}) < \frac{1}{x}$.

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QUIZ # 4: Code 2 (Duration = 20 minutes)

NAME:	_ ID:	_ Section:
Exercise 1 (5 points)		
Find all points at which the curve $y = \cosh$	(x) — 3x has a horizontal ta	ngent line.

Exercise 2 (5 points) Show that for every x > 0, $\frac{1}{1+x} < \ln(1+\frac{1}{x}) < \frac{1}{x}$.