1. This problem concerns the graph of the equation $e^{y}=2 \cos (2 x)$.
(a) Use implicit differentiation to find $\frac{d y}{d x}$.
(b) Use your answer from part (a) to find the slope of the tangent line to the graph at the point $\left(\frac{\pi}{6}, 0\right)$.

Name: $\qquad$

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(a) Use implicit differentiation to find $\frac{d y}{d x}$.
(b) Use your answer from part (a) to find the slope of the tangent line to the graph at the point $\left(0, \frac{\pi}{6}\right)$.
$\qquad$
2. This problem concerns the graph of the equation $y \cos (y)=x^{2}$.
(a) Use implicit differentiation to find $\frac{d y}{d x}$.
(b) Use your answer from part (a) to find the slope of the tangent line to the graph at the point $(\sqrt{\pi},-\pi)$.

Name:

I'm in the Thurs11 Thurs12 Thurs1 or Fri10 recitation. (Circle one)
October 11, 2012

1. This problem concerns the graph of the equation $x \sin (y)=y$.
(a) Use implicit differentiation to find $\frac{d y}{d x}$.
(b) Use your answer from part (a) to find the slope of the tangent line to the graph at the point $\left(\frac{\pi}{2}, \frac{\pi}{2}\right)$.
