Week 6 Recitation Problems
MATH:113, Recitations 304 and 305

Names: _____

Fact 1: the power rule.

Fact 2: the product rule.

Fact 3: linearity of derivatives.

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Round	Attempted	Correct
1		
2		
3		
Totals		

Bonus problem: Prove that
$$\frac{\mathrm{d}}{\mathrm{d}x}\ln(x) = \frac{1}{x}.$$
Hints: let $t = x/h$, then use the fact that $e = \lim_{h\to 0}(1+t)^{1/t}$.

Proof 1: Derivative of the natural logarithm.