## $\begin{array}{c} \text{MTH 124.019 Quiz 9} \\ \text{Friday 16 April 2010} \end{array}$

Name:

Compute the following derivatives. Make sure you show each step.

1. 
$$\frac{d}{dx}[x^2\ln(x)] =$$

2. 
$$\frac{d}{dt} \left[ \frac{t}{1+\ln t} \right] =$$

$$3. \ \frac{d}{dz} \left[ \frac{9-z^2}{9+z^2} \right] =$$

4. 
$$\frac{d}{dr}[(r^2+5)^3(3r^3-2)^2] =$$