Bonus Question #1 :

Define <u>hyperbolic sine</u> and <u>hyperbolic cosine</u> as follows:

- $\sinh(x) = \frac{1}{2}(e^x - e^{-x})$
- $\cosh(x) = \frac{1}{2}(e^x + e^{-x})$

What is $\frac{d}{dx}(\cosh(x))$, in terms of $\sinh(x)$?

$\left\{ \begin{array}{l} \text{Worth 2 bonus points.} \\ \text{Due Wed., Jan. 19} \end{array} \right\}$