A table of derivatives and anti-derivatives

This example is based upon a nice example in the Pythontex gallery, see https://github.com/gpoore/pythontex/. It uses a tagged block to capture the `Sympy` output for later use in the body of the LaTeX table.

```
from sympy import *

var('x')

# Create a list of functions to include in the table
funcs = [['sin(x)',r'\\'],        ['cos(x)',r'\\'],        ['tan(x)',r'\\'],
         ['asin(x)',r'\\[5pt]'], ['acos(x)',r'\\[5pt]'], ['atan(x)',r'\\[5pt]'],
         ['sinh(x)',r'\\'],       ['cosh(x)',r'\\'],       ['tanh(x)',r' ']]

# pyBeg (CalculusTable)
for func, eol in funcs:
    myddx = 'Derivative(' + func + ', x)'
    myint = 'Integral(' + func + ', x)'
    print(latex(eval(myddx)) + '&=' + latex(eval(myddx + '.doit()')) + r'\quad & \quad')
    print(latex(eval(myint)) + '&=' + latex(eval(myint + '.doit()')) + eol)
# pyEnd (CalculusTable)
```

```
\begin{align*}
   \py {CalculusTable}
\end{align*}
```

$$\frac{d}{dx} \sin(x) = \cos(x)$$

$$\frac{d}{dx} \cos(x) = -\sin(x)$$

$$\frac{d}{dx} \tan(x) = \tan^2(x) + 1$$

$$\frac{d}{dx} \operatorname{asin}(x) = \frac{1}{\sqrt{-x^2 + 1}}$$

$$\frac{d}{dx} \operatorname{acos}(x) = -\frac{1}{\sqrt{-x^2 + 1}}$$

$$\frac{d}{dx} \operatorname{atan}(x) = \frac{1}{x^2 + 1}$$

$$\frac{d}{dx} \sinh(x) = \cosh(x)$$

$$\frac{d}{dx} \cosh(x) = \sinh(x)$$

$$\frac{d}{dx} \tanh(x) = -\tanh^2(x) + 1$$

$$\int \sin(x)\, dx = -\cos(x)$$

$$\int \cos(x)\, dx = \sin(x)$$

$$\int \tan(x)\, dx = -\log(\cos(x))$$

$$\int \operatorname{asin}(x)\, dx = x \operatorname{asin}(x) + \sqrt{-x^2 + 1}$$

$$\int \operatorname{acos}(x)\, dx = x \operatorname{acos}(x) - \sqrt{-x^2 + 1}$$

$$\int \operatorname{atan}(x)\, dx = x \operatorname{atan}(x) - \frac{\log(x^2 + 1)}{2}$$

$$\int \sinh(x)\, dx = \cosh(x)$$

$$\int \cosh(x)\, dx = \sinh(x)$$

$$\int \tanh(x)\, dx = x - \log(\tanh(x) + 1)$$