Assignment 9: Exercise 1

Cameron Fredrickson

(a) $\displaystyle\sum_{\substack{x+y+z=n \\ x,y,z\geq 0}} xyz$

(b) $\overbrace{\alpha+\beta+\gamma+\delta}^{\text{this equals 3}}+\underbrace{\overbrace{a+b+c+d}^{\text{this equals 4}}}$

(c) $x^n + y^n \overset{?}{=} z^n$ for $x,y,z \in \mathbb{Z}$
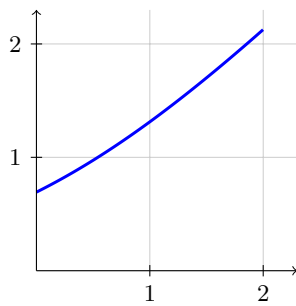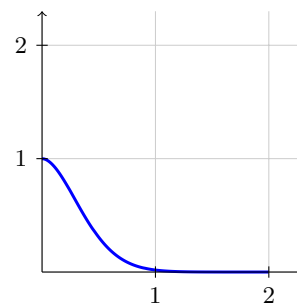

Figure 1: Graph of $\log(1+e^x)$
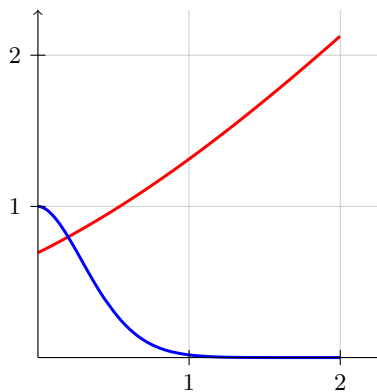

Figure 2: Graph of $\sin^{x^2} x$

Figure 3: $\sin^{x^2} x$ and $\log(1+e^x)$ together on the same graph