QUIZ 9

1. (3 points) Find the Taylor series for $\sqrt{x}$ at $x = 1$.

2. (3 points) Find the quadratic Taylor polynomial for $e^{2x} \sin x$ at $x = 0$.

3. (4 points) Estimate $\sin(\frac{1}{3})$ using the cubic Taylor polynomial for $\sin x$ at $x = 0$. Also give a bound for the error.