

Mathematics Department

 Math 330

 HW1

 Student name: ………………………… ID no.: …… sec……..

1. Evaluate the following with three digits arithmetic and rounding

$$\frac{\frac{23}{317}+ \frac{177 }{19}+\frac{13}{2177}}{\frac{117}{33}}$$

2-If $f\left(h\right)=1+h+o(h^{2})$ and $g\left(h\right)=h+o(h^{3})$

 Find the order of approximation of the error of

1. $f\left(h\right)+ g (h)$
2. $f\left(h\right) g (h)$
3. Estimate $sin(0.23)$ with | error |$\leq 10^{-5}$