Finding experimental period

$$x=0.1625\sin(\left(5.0475t+1.9667\right))+0.0006$$

B = 5.0475

$$T=\frac{2π}{B}$$

$$T=\frac{2π}{5.0475}$$

Texperimental = 1.2448 s

Finding theoretical period

$$T=2π√(\frac{L}{g})$$

$$T=2π√(\frac{0.38}{9.81})$$

Ttheoretical = 1.2366 s

Finding Percent Error

$$\% error=\frac{Texp-Ttheor}{Texp}\*100$$

$\% error=\frac{1.2448-1.2366}{1.2448}\*100$ = 0.66%