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utton.epsicon.Letthebobswingforabout17periods.Calculatethemeanandstandarddeviationbysimplyclickingonthetablestatist
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$$T = T_0 \left(1 + \frac{1}{2^2} \sin^2 \frac{\theta}{2} + \frac{1(3^2)}{2^2(4^2)} \sin^4 \frac{\theta}{2} + \cdots \right)$$

$$T_0 = \frac{2\pi}{\theta} \sqrt{L/g}$$

$\theta T/T_0$
Period vs. Length:

$$\frac{T}{T_0} = \frac{L}{L_0} = \frac{T_0}{T_0} = \frac{L}{L_0^2} = \frac{T_0^2}{T_0^2}$$

Measurement
of

$$T = \frac{2\pi}{\theta} \sqrt{L/g}$$

$\frac{T}{L}$
Calculate

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$$\Delta g = \frac{g \sqrt{(\Delta L/L)^2 + (2\Delta T/T)^2}}{M}$$

M =