

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

$$\implies T^2 = 4\pi^2 \times \frac{L}{g}$$

$$\implies T^2 = \frac{4 \times \pi^2}{g} \times L$$

Graph is T^2 versus L

so slope must be $m = \frac{4 \times \pi^2}{g}$

$$\implies g = \frac{4 \times \pi^2}{\text{slope}}$$