$$egin{array}{ll} T \ = \ 2 imes \pi \sqrt{rac{L}{g}} \ &\Longrightarrow \ T^2 \ = \ 4 \pi^2 imes rac{L}{g} \end{array}$$

$$\implies T^2 = rac{4 imes\pi^2}{g} imes L$$

Graph is $T^{\,2}$ versus L

so slope must be $m \ = \ rac{4 imes\pi^2}{g}$

$$\implies g = rac{4 imes\pi^2}{slope}$$