

Pendulum Worksheet #1

1. A pendulum makes 42 cycles in 50.0 seconds.
 - a. What is its period?

 - b. What is its frequency?

2. A geologist's simple pendulum, whose length is 37.10 cm, has a frequency of 0.8190 Hz at a particular location on the Earth. What is the acceleration of gravity at this location?

3. How long must a simple pendulum be if it is to make exactly one complete cycle per second ($g = 9.80 \text{ m/s}^2$)?

5. The period of a simple pendulum is 35.90 cm long is $\tau = 1.200$ s. Find the value of g at this location.