

Physics is the study of

Kinematics describes

period:

Example: A leaking tap drips 58 times in one minute. What is its period?

If period is measured in seconds then .

Generally, period is measured in seconds. The symbol used for period is "T".

frequency:

Example: What is the frequency of the tap?

Example: A pendulum on a clock completes 240 cycles in 60 s.

- b. what is its period?
- b. what is its frequency?
- c. what is the relationship between frequency and period?

a.

b.

c.

Practice: Since the answers are given for all the problems, I want to see your work.

Remember, no work, no marks!

1. A guitar string vibrates 750 times in 3.00 s. Calculate its period and frequency.

(0.00400 s, 250 Hz)

2. If 180 waves wash up on a shore in 1.00 h, what is the time between waves, in seconds?

(20.0 s)

3. Calculate the frequency and period of a car engine that makes 4800 revolutions in 1.00 min.

(80.0 Hz, 0.0125 s)

4. A ticker tape timer makes 360 dots in 6.0 s. How long does it take to make six dots? (0.10s)