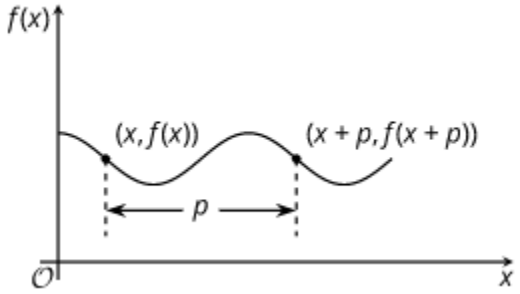
Unit 6 Glossary Terms

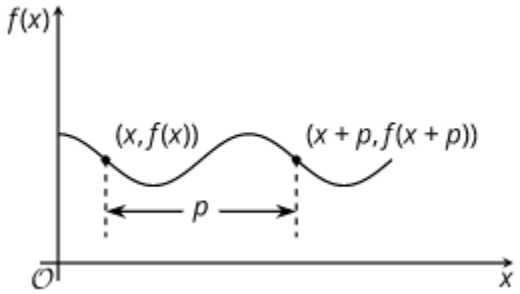
period

The length of an interval at which a periodic function repeats. A function f has a period, p, if$f\ (x\ +\ p)\ =\ f(x)$ for all inputs x .



Period function

A function whose values repeat at regular intervals. If f is a periodic function then there is a number p, called the period, $f\ (x\ +\ p)\ =\ f(x)$ so that for all inputs x .



Unit circle

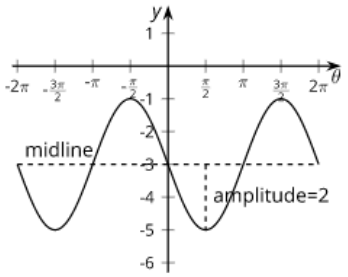
The circle in the coordinate plane with radius 1 and center the origin.

Pythagorean identity

The identity $sin^2(x) + cos^2(x) = 1$ relating the sine and cosine of a number. It is called the Pythagorean identity because it follows from the Pythagorean theorem.

Amplitude

The maximum distance of the values of a periodic function above or below the midline.



Midline

The value halfway between the maximum and minimum values of a period function. Also the horizontal line whose y-coordinate is that value.