Trigonometric.

Trigonometric functions are periodic or cyclic functions, and include sine, cosine and tangent functions. The functions in this group illustrate the basic properties of cyclic functions.

Sine. Plots a single cycle of a sine curve between ±π.

Cosine. Plots a single cycle of cosine curve between ±π. Note the 90° phase shift relative to the sine curve.

Sin(2x). Plots two cycles over the same interval, showing that the frequency of the wave is a function of x.

Cos (2x). As above for a cosine wave.

Sin squared. This is sin(x) x sin(x). This illustrates that this function yields a sum and difference of the original curve, shown by the period doubling and 'dc' offset.

Cos squared. As above for a cosine curve.

Tangent. A single 'cycle' of the tangent function. Tan is a discontinuous function, approaching ±infinity at the extremes.

Sinc Function. This function is ubiquitous in many branches of engineering. Here it is in its most basic form, sin(x)/x.