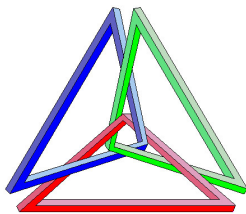


Primary Trigonometric Functions

J. Garvin



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Primary Trigonometric Functions

The three primary trigonometric functions are:

- $f(x) = \sin x$
- $f(x) = \cos x$
- $f(x) = \tan x$

We have seen these functions before, where x was measured in degrees.

When x is measured in radians, the graphs are exactly the same – only the labelling of the x -axis changes.

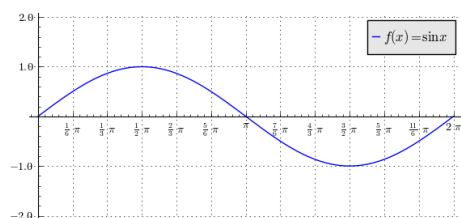
Most graphs of trigonometric functions can be sketched by using the 5 key points at 0 , $\frac{\pi}{2}$, π , $\frac{3\pi}{2}$ and 2π , transforming as necessary.

J. Garvin — Primary Trigonometric Functions
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Primary Trigonometric Functions

Example

Sketch a graph of $f(x) = \sin x$.

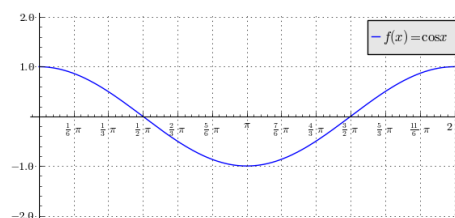


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Primary Trigonometric Functions

Example

Sketch a graph of $f(x) = \cos x$.

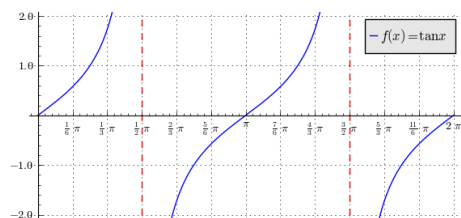


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Primary Trigonometric Functions

Example

Sketch a graph of $f(x) = \tan x$.

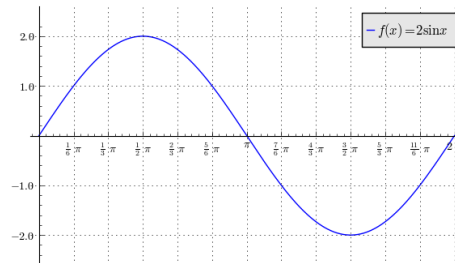


J. Garvin — Primary Trigonometric Functions
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Primary Trigonometric Functions

Example

Sketch a graph of $f(x) = 2 \sin x$.

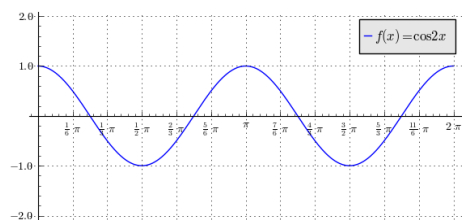


J. Garvin — Primary Trigonometric Functions
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Primary Trigonometric Functions

Example

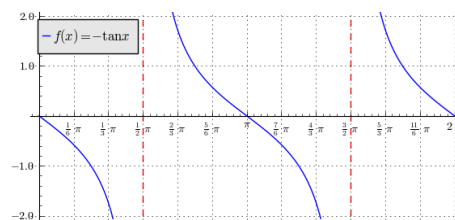
Sketch a graph of $f(x) = \cos 2x$.



Primary Trigonometric Functions

Example

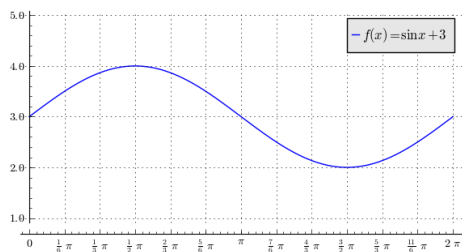
Sketch a graph of $f(x) = -\tan x$.



Primary Trigonometric Functions

Example

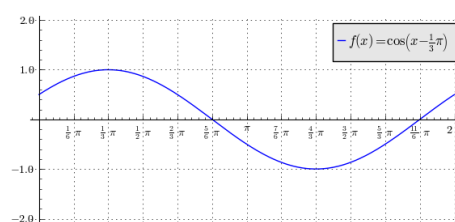
Sketch a graph of $f(x) = \sin x + 3$.



Primary Trigonometric Functions

Example

Sketch a graph of $f(x) = \cos(x - \frac{1}{3}\pi)$.



Questions?

