1 Graphing Trigonometric Functions

1.1 Goals

I will be able to graph a trigonometric functions using a unit circle as a guide.

I will be able to translate and transform trigonometric funtions.

1.2 Standards

1.3 Connections

Graphing a Sine Wave

Recall that the radius of the unit circle is 1, and the points on the unit circle (x, y) also correspond to the trig functions $(\cos, \sin)$.

We can now draw a graph where the x axis is the *angle* and the y axis is the *trig function*: $f(x) = \sin(x)$.

Graphing a Cosine Wave

Now draw a graph where the x axis is the *angle* and the y axis is the *trig function*: $f(x) = \cos(x)$.

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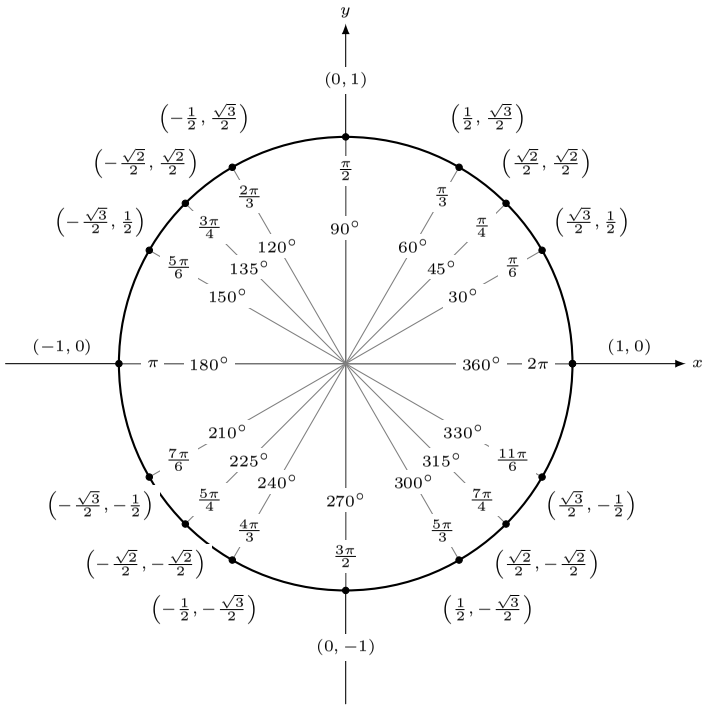

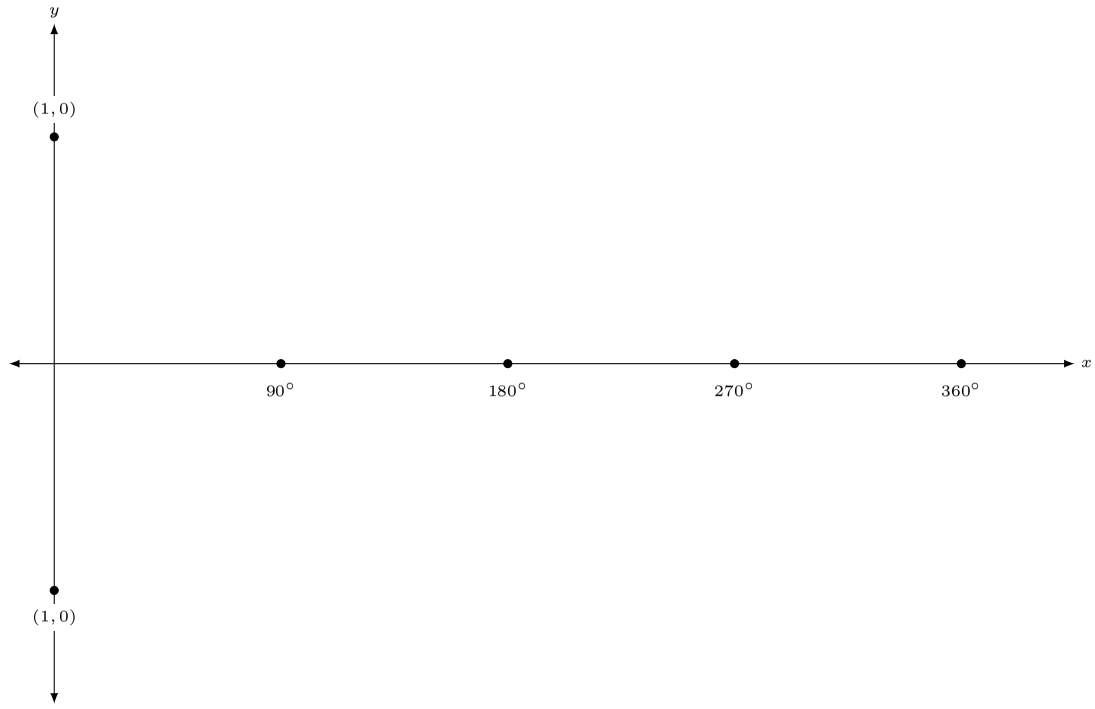

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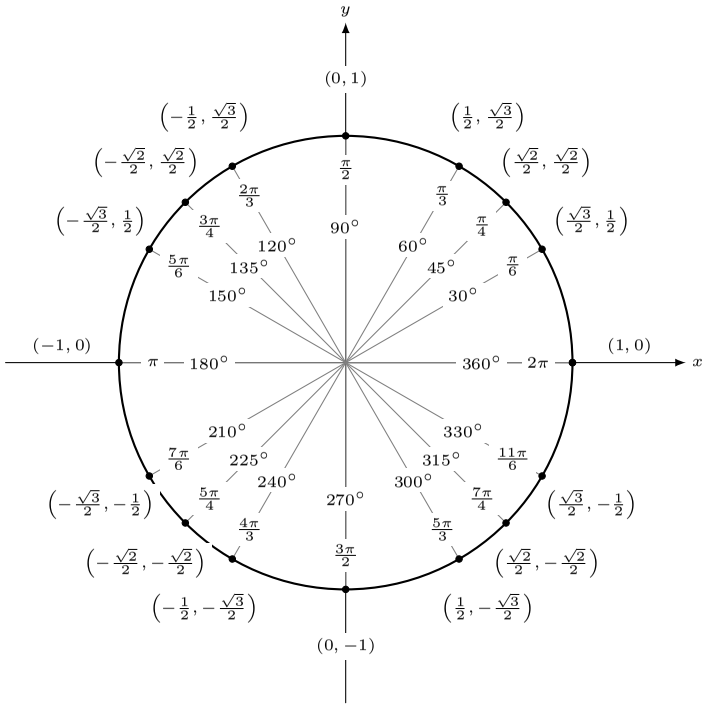

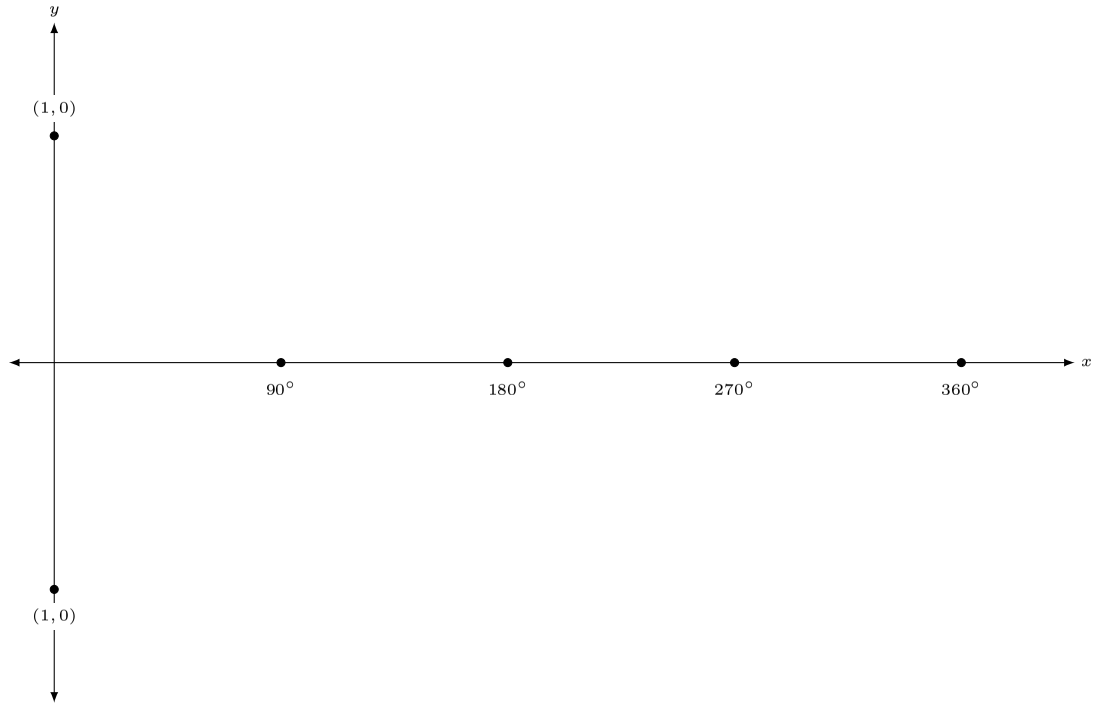

Multipliers

What happens if we multiply something in front of the wave?

$$f(x) = 2 \cdot \sin(x)$$