

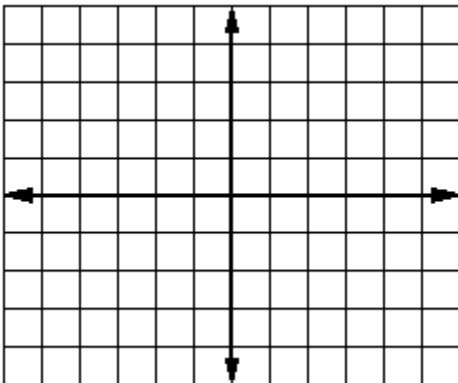
Sine and Cosine Graphs

Define what each of the variables in the equation $y = a\sin(bx + c) + d$ mean on a graph. Include formulas one would use to determine these graph properties (i.e. using division between two or more of the variables or using an absolute value to determine said properties)

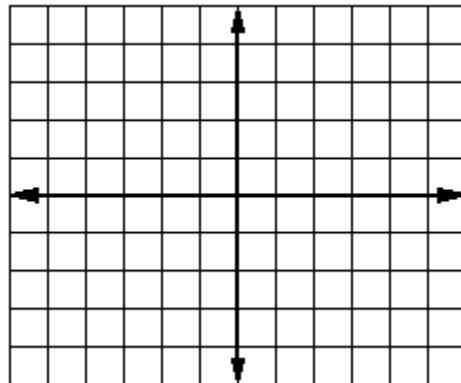
Write an equation using cosine that would make it equal to $\sin x$

Display a single period of a cosine graph and a sine graph starting from $x=0$. They both have an amplitude of one.

Cosine



Sine



Determine the amplitude and period without a graphing calculator

- $y = \frac{9}{5} \cos\left(\frac{\pi}{4}x\right) + 1$
- $y = 6 \sin\left(\frac{\pi}{2}x\right)$