

8.4 – Writing Equations for Sine and Cosine Functions

Sine Function → _____

Cosine Function → _____

where use the following “formulas” to find each parameter (the value of each letter):

$a =$ _____ $b =$ _____ $c =$ _____ $d =$ _____

Example 1: Given specific set of details about a function, write its equation.

Given Info	Function	Work to Find a , b , c , and d	Equation for Function
a.) amplitude = 4 , period = $\frac{\pi}{3}$, left by $\frac{\pi}{2}$, up by 5	sine		
b.) amplitude = 1 , period = 4π , right by 2π , down by 3	cosine		

Example 2: Given a specific graph of a function, write its equation.

Given Graph	Info About Graph	Work to Find a , b , c , and d	Equation for Function
a.) 			
b.) 			
c.) 			
d.) 			