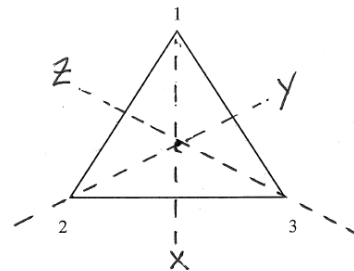
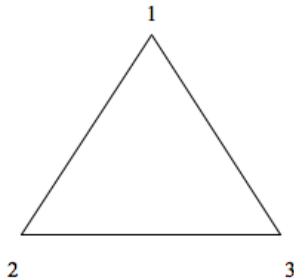


Name _____

Cayley Table for Symmetry Group Of The Equilateral Triangle

In class we wrote out the Cayley Table for the Rectangle, knowing that we had four operations that were symmetries. I want you to write out the Cayley Table for the Equilateral Triangle.



By looking at the figure to the right, you can see that there are five symmetries associated with the equilateral triangle. Let's denote them below. Next to the letter write down the meaning of each transformation T and its inverse T^{-1} in the appropriate column and complete the rest of the table.

Operation	Meaning In Words	Inverse Operation
\mathcal{V}	Rotate about center counter-clockwise by 120 degrees	
\mathcal{W}		
\mathcal{X}		
\mathcal{Y}		
\mathcal{Z}		

Complete the Cayley Table for the Symmetry Group for the Equilateral Triangle

\circ	I	ν	ω	α	γ	ζ
I						
ν						
ω						
α						
γ						
ζ						