## Calculus in 3D

Geometry, Vectors, and Multivariate Calculus

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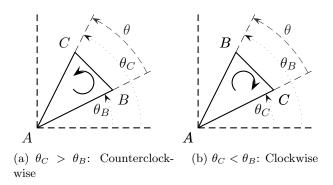
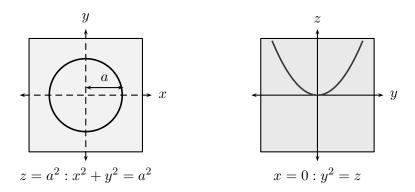
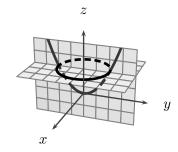


Figure 1: Orientation of  $\triangle ABC$ 

## Slices



## Combined Slices



## The Surface

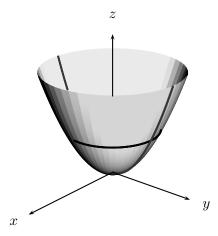


Figure 2: The Surface  $x^2 + y^2 = z$