**How to Import**

To import the variables and equations, copy and paste them into the same .txt file. You do not need to separate them in any way, Solidworks should sort them on its own.

**Do not:**

* Edit the equations. Change the variables instead.
* Rename sketches. The equations are used to dimension specific lines on specific sketches. If you change either, the equation may not work anymore.
* Put a space between the variable value and its units. SolidWorks hates this.
* Make variables with the same name but different cases.

**Notes:**

* Equations sometimes get mad when you try importing them into a different part or an assembly. This should not affect anything, and you don’t need to worry.

# Global Variables

"Cone\_Thickness"= 0.12in'How thick the main portion of the nose cone is.

"Cone\_Hole\_Radius"= 0.25in'The radius of the hole that connects the main nose cone to the metal tip.

"Shoulder\_Length"= 4in'The length of the cone shoulder.

"Shoulder Thickness"= 0.125in'The thickness of the cone shoulder.

"Metal\_Tip\_Length"= 4'Length of the metal tip.

"Tip\_Hole\_Radius"= 0.2'The radius of the hole used to attach the metal tip to the rest of the nose.

"Tip\_Hole\_depth" = 1.6'The depth of the hole used to attach the tip to the rest of the nose cone.

"Total\_Cone\_Length"= 46in'The total length of the nose cone, from the very tip to the base of the shoulder.

"Tab Length"= 0.25in'How far the tabs protrude inside the nose.

"Tab Thickness"= 0.25in'How thick the tabs are.

# Equations

"D3@Tab Sketch" = "Cone\_Thickness"'Assigns the thickness of the nose cone.

"D7@Tab Sketch" = "Cone\_Thickness"'Assigns the thickness of the nose cone.

"D4@Tab Sketch" = "Shoulder\_Length"'Assigns the shoulder length.

"D5@Tab Sketch" = "Shoulder Thickness"'Assigns the shoulder thickness.

"D3@Nose Tip Sketch" = "Tip\_Hole\_Radius"'Assigns the hole radius to the metal tip.

"D2@Nose Tip Sketch" = "Tip\_Hole\_depth"'Assigns the hole depth to the metal tip.

"D1@Nose Tip Sketch"= "Metal\_Tip\_Length"'Assigns the length of the metal tip.

"D11@Tab Sketch"= "Tab Length"'Assigns the length the tab protrudes.

"D9@Tab Sketch"= "Tab Thickness"'Assigns the thickness of the tab.

"Tab Fillet"= 0.75deg'The angle of the fillet for the tabs.

"D10@Tab Sketch"= "Tab Fillet"'Assigns the fillets to the tabs.