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```
function [power] = PowerSLUFFunc(rho, vel, area, cD0, spanEfficiency, mass)

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% Author: Preston Wright, Hudson Reynolds
% Description: function that finds the thrust at SLUF for given conditions
% and outputs the calculated thrust
%
% Inputs:
% area - wing / reference area [m^2]
% rho - density of air [kg/m^3]
% cD0 - coefficient of drag at zero AoA
% vel - velocity [m/s]
% mass - mass of aircraft [kg]
%
% Outputs:
% power - calculated thrust for given inputs
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

## Initializations

```
g = 9.81;
```

## Calculations

```
power = ((1/2) * rho * vel^3 * area * cD0) + ...
        2 * spanEfficiency * ((mass * g)^2/(rho * area * vel));
```

```
Not enough input arguments.
```

```
Error in PowerSLUFFunc (line 21)
power = ((1/2) * rho * vel^3 * area * cD0) + ...
```

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