

```
clc
clear
close all
%%
syms a

g = 9.81;
Isp1 = 275;
Isp2 = 400;
e1 = 0.08;
e2 = 0.15;
u = 7700+1200;

sum = (((1/e1)*(1-(1/(a*g*Isp1))))^(g*Isp1/u)) * (((1/e2)*(1-(1/(a*g*Isp2))))^(g*Isp2/u)))-exp (1) == 0;
a = double(vpasolve(sum, a));

l1 = e1/(a*g*Isp1*(1-e1)-1);
l2 = e2/(a*g*Isp2*(1-e2)-1);
%%
u1 = Isp1*g*log((1+l1)/(e1+l1));
u2 = Isp2*g*log((1+l2)/(e2+l2));
utot = u1+u2;
```