
ASEN 3113 - Assignment 07 - Main

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```
clear,clc,close all
```

```
h = 150; %W/m^2k
```

```
rho = 8000; %kg/m^3
```

```
L = 0.02; %m
```

```
Cp = 570; %J/kgK
```

```
b = h/(rho*L*Cp);
```

```
Ti = 18;
```

```
Tinf = 950;
```

```
v = 0.005:.001:.06; %m/s
```

```
t = 3./v; %s
```

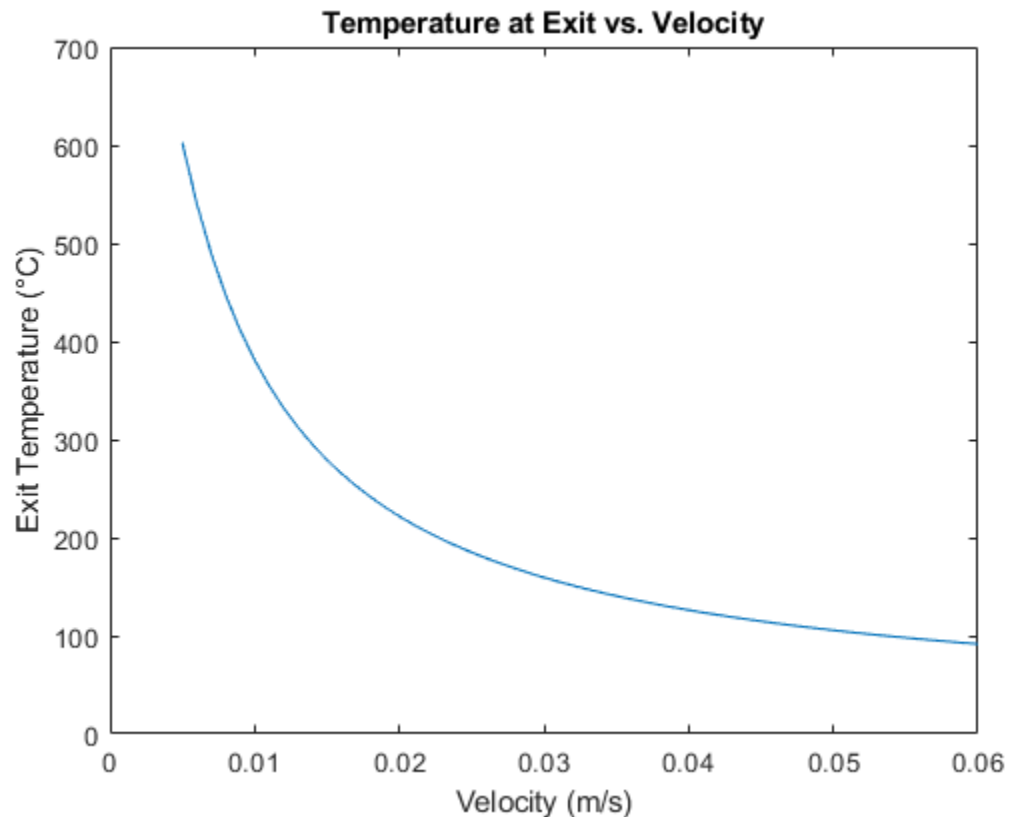
```
Te = exp(-b.*t).*(Ti-Tinf)+Tinf;
```

```
plot(v,Te)
```

```
title('Temperature at Exit vs. Velocity')
```

```
xlabel('Velocity (m/s)')
```

```
ylabel(['Exit Temperature (',char(176),'C)'])
```



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