

---

```

%Now I solve and plot
%I first define my n values from 10 to 100
n=[10:100];
%Next I define the variable grains by using the function I created
grains=num_grains(n)

%I create two subplots, one for a regular plot, and one as a plot with
the
%y axis scaled logarithmically
subplot(2,1,1)
plot(n, grains)
%Now I label the graph
xlabel('Grain Size'), ylabel('Number of Grains'), title('Number of
Grains vs. Grain Size')

subplot(2,1,2)
semilogy(n, grains)
%Again, I label the graph appropriately
xlabel('Grain Size'), ylabel('Number of Grains'), title('Number of
Grains vs. Grain Size')

```

```
grains =
```

```
1.0e+29 *
```

```
Columns 1 through 7
```

```
0.0000    0.0000    0.0000    0.0000    0.0000    0.0000    0.0000
```

```
Columns 8 through 14
```

```
0.0000    0.0000    0.0000    0.0000    0.0000    0.0000    0.0000
```

```
Columns 15 through 21
```

```
0.0000    0.0000    0.0000    0.0000    0.0000    0.0000    0.0000
```

```
Columns 22 through 28
```

```
0.0000    0.0000    0.0000    0.0000    0.0000    0.0000    0.0000
```

```
Columns 29 through 35
```

```
0.0000    0.0000    0.0000    0.0000    0.0000    0.0000    0.0000
```

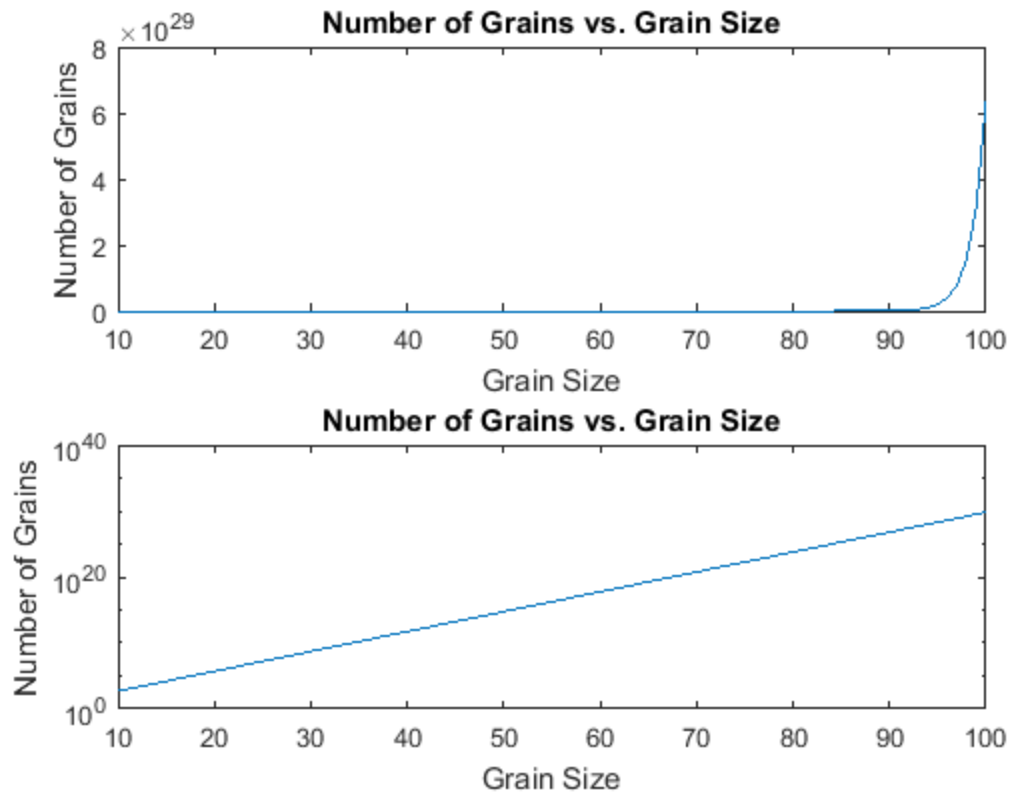
```
Columns 36 through 42
```

```
0.0000    0.0000    0.0000    0.0000    0.0000    0.0000    0.0000
```

```
Columns 43 through 49
```

---

0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Columns 50 through 56						
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Columns 57 through 63						
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Columns 64 through 70						
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Columns 71 through 77						
0.0000	0.0000	0.0000	0.0000	0.0001	0.0002	0.0004
Columns 78 through 84						
0.0008	0.0015	0.0031	0.0062	0.0124	0.0248	0.0495
Columns 85 through 91						
0.0990	0.1981	0.3961	0.7923	1.5846	3.1691	6.3383



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