ECON807 Problem Set

4: Solving the RCK Model with MATLAB

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Setup

```
clear
cd C:\Users\mango\Documents\GitHub\econ807\ps4
```

I. Parameter Specification

Establish the parameters to be used in the program.

```
A = 1.8855; % Productivity
beta = 0.99; % Time discount factor
sigma = 1; % Utility function parameter
alpha = 0.33; % Weight of Capital
delta = 1; % Depreciation
N = 10 % Nodes in the grid
```

We then establish the functions, as follows:

```
u = @(c) (c^(1-sigma)-1)/(1-sigma); % Utility function
prod_fn = @(k) A*k^(alpha); % Production function
% Test
u(1.5)
```

```
ans = NaN
```

```
prod_fn(2)
```

```
ans = 2.3701
```

II.