Econ202A Assignment 1

Chris Ackerman

October 13, 2020

Contents

1 Problem 1

Consider the following problem solved be a representative agent:

$$\max \sum_{t=0}^{\infty} \beta^t \log c_t, \quad 0 < \beta < 1$$

subject to

$$\begin{aligned} c_t + k_{t+1} &\leq k_t^{\theta}, \quad 0 < \theta < 1, \\ k_0 &\text{ given.} \end{aligned}$$

(a)

$$\begin{aligned} v(k_0) &= \max(u(c_0) + \beta v(k_1)) \\ v(k_0) &= \max(u(f(k_0) - k_1) + \beta v(k_1)) \end{aligned}$$

(b)

(c)

2 Problem 2

3 Problem 3 (due to turn in)