Some additional remarks to examples in Chapter 1

Example 1.2. For this example, we should have $x > \dfrac{1}{10}$ (not $x \geq \frac{1}{10}$ as written) in the definition of the utility function. Under autarchy, the consumer must choose I such that utility The maximization problem for society consists in finding I such that

$$\frac{3}{4} \ln \left(\ln \left(10 - 5I \right) \right) + \frac{1}{4} \ln \left(\ln \left(10(1 - I + 1, 2I) \right) \right)$$

(the constraint on c_2 should be $c_2 = 1 - I + 1, 2I$, the patient individual gets what is left over from investment together with reopayment of investment) which is decreasing in I, so we should have $I = 0$, meaning that $c_1 = 1$ and $c_2 = 1$.

The maximum for society of

$$\frac{3}{4} \ln \left(\ln \left(10 \frac{1 - I}{\frac{3}{4}} \right) \right) + \frac{1}{4} \ln \left(\ln \left(10 \frac{1, 2I}{\frac{1}{4}} \right) \right)$$

has first order condition

$$\frac{1}{c_1 \ln(10c_1)} = 1, 2 \frac{1}{c_2 \ln(10c_2)}$$

where (c_1, c_2) should satisfy $\dfrac{3}{4} c_1 = 1 - I$ and $\dfrac{1}{4} c_2 = 1, 2I$, from which

$$c_1 = 1 - \frac{0, 25}{1, 2} c_2$$

(both equations are stated incorrectly in the text) with the result $(1, 013, 1, 152)$ (correctly stated in the text).