Review Questions - Chapter 13

1. (a) Define primary deficit. What is the difference between the primary deficit and the total deficit?
(b) Why are deficits “bad”? Explain what kinds of economic problems arise when governments run deficits.
(c) Use the relationship, \( Y = C + I + G \), to demonstrate how large budget deficits can cause declines in the level of investment. Explain why this need not always be the case.
(d) Provide an economic explanation for why richer economies might experience worse fiscal problems in terms of health spending than relatively less rich economies.

2. (a) Use the definition of total deficit to derive equation 13.3. That is, derive the expression for the change in the debt-GDP ratio, \( \Delta \left( \frac{B_t}{Y_t} \right) = \left( \frac{i - g_Y}{Y_t} \right) \frac{B_t}{Y_t} + \frac{(G - T_t)}{Y_t} \). Assume the economy grows at the constant rate, \( g_Y \).
(b) If the primary budget is balanced every year, \( i = 4.5\% \), the economy is growing at 3.5\%, and the initial debt-GDP ratio is 15\%, calculate the debt-GDP ratio for the next five years.
(c) If instead the initial debt-GDP ratio is 10\%, calculate the debt-GDP ratio for the next five years.
(d) If \( g_Y \) increases by .5\% every after the first year and there’s a primary deficit of 2\% every year, do part (c) over again. Provide an economic interpretation for why your answer changes.