What follows is a more detailed guide to obtaining the numbers in Table 3.4 on p.69 by hand, without a computer. We strongly encourage students to go through the procedure: unless this is properly understood nothing else in the book will be intelligible.

If we start by solving the model for Y, everything will become clear. Thus

$Y = G + C$	line 2
$T = \theta \cdot Y$	line 3
$YD = Y - T$	line 4
$= Y \cdot (1 - \theta)$	
$C = \alpha_1 \cdot YD + \alpha_2 \cdot H_{-1}$	line 5

Period 1 is the "beginning of the world", where all variables are zero. In period 2, then, $H_{-1} = 0$ and consumption reduces to

$$C = \alpha_1 \cdot Y \cdot (1 - \theta)$$

We can now substitute this into line 2 viz

$$Y = G + \alpha_1 \cdot Y \cdot (1 - \theta)$$
$$Y - \alpha_1 \cdot Y \cdot (1 - \theta) = G$$
$$Y \cdot [1 - \alpha_1 \cdot (1 - \theta)] = G$$
$$Y = G / [1 - \alpha_1 \cdot (1 - \theta)]$$

So, when *G* increases to 20 in period 2, having numbers for α_1 (= 0.6) and θ (= 0.2), we can calculate *Y*:

$Y = 20/ [1 - 0.6 \cdot (1 - 0.2)]$ = 38.462 (rounded in the table on p.69 to 38.5)

As soon as you have solved for *Y*, you can fill in all the remaining numbers in column 2 including ΔH and therefore *H*

$T = 0.2 \cdot 38.5 = 7.7$	line 3
$YD = 38.5 - 7.7 = 30.8$	line 4
$C = 0.6 \cdot 30.8 = 18.5$	line 5
$\Delta Hs = 20 - 7.7 = 12.3$	line 6
$\Delta Hh = 30.8 - 18.5 = 12.3$	line 7
$H = 12.3 + 0 = 12.3$	line 8

You now have all the material you need to solve for *Y* in period 3 (H_{-1} = 12.3) and the whole column in period 3. And so on.

The system reaches a steady state when $\Delta H = 0$ and hence $YD = C$

WG