Date

42

1. 1) $y = \frac{a + i + g + \beta tr - \beta t}{1-\beta} = \frac{100 + 50 + 200 + 0.8 \times (625 - 250)}{1 - 0.8}$

$= 1000$

2) $k_i = \frac{\Delta y}{\Delta i} = \frac{dy}{di} = \frac{1}{1-\beta} = 5.$

$k_g = \frac{dy}{dg} = \frac{1}{1-\beta} = 5.$

$k_t = \frac{dy}{dt} = -\frac{\beta}{1-\beta} = -\frac{0.8}{0.2} = -4$

$k_{tr} = \frac{\beta}{1-\beta} = 4$

$k_b = \frac{dy}{dg} \quad k_g + k_t = 1$

2. 1). ~~$1200 = \frac{100 + 50 + g' + 0.8 \times (625 - 250)}{1 - 0.8}$~~

~~$\Rightarrow g' = 240 \quad \therefore \Delta g = g' - g = 40.$~~

$\Delta g = \frac{\Delta y}{k_g} = \frac{1200 - 1000}{5} = 40.$

2) $\Delta t = \frac{\Delta y}{k_t} = \frac{200}{-4} = -50.$

b). $\frac{\Delta y}{k_b} = 200.$

3. $k_{\bar{i}} = \frac{1}{1-\beta} = \frac{1}{0.25} = 4.$

$\Delta y = \Delta \bar{i} \cdot k_{\bar{i}} = (600 - 400) \times 4 = 800.$