Key to Ch. 3 practice problems.

1.) $\hat{\pi}_t = B E_t[\hat{\pi}_{t+1}] + k \hat{y}_t$

2.) $$\frac{\bar{Y}(Y_t - \bar{Y})}{\bar{Y}} = \frac{\bar{R}}{\bar{L}}\left(\frac{(R_{t+1} - R_t)}{\bar{R}} - \frac{(L_{t+1} - L_t)}{\bar{L}}\right) - \frac{1}{3}\bar{Y}\left(\frac{Y_{t-1} - \bar{Y}}{\bar{Y}}\right)$$

$$\bar{Y}\,\hat{Y}_t = \frac{\bar{R}}{\bar{L}} E_t\left[\hat{R}_{t+1} - \hat{L}_{t+1}\right] - \frac{1}{3}\bar{Y}\,\hat{Y}_{t-1}$$

where $\hat{X}_t = \dfrac{(X_t - \bar{X})}{\bar{X}}$

3.) As $\varepsilon \to \infty$, $k \to 0$ in the New Keynesian Phillips Curve. Deviations of $\pi_t - B\pi^e_{t+1}$ from 0 now produce larger deviations of $\hat{y}_t$.