25. Incorrect. The answer is true not false. From the last question in steady state,

$$c = f(k) - (\delta + n)k$$

Maximize steady state *c* with respect to *k*

$$\frac{dc}{dk} = f_k(k) - (n + \delta) = 0 \rightarrow f_k = (n + \delta)$$

Second order conditions require $f_{kk} < 0$ or diminishing marginal product for the capital labor ratio.

Since consumption per capita is $c=(1-s)f(k)$ then $sf(k)= f(k)-c$. Substitute into the steady state above and solve for at steady state *c* as follows:

$$f(k) - c = (\delta + n)k \rightarrow c = f(k) - (\delta + n)k$$