## Economics 314 Daily Question \#29

## Spring 2014 April 25

1. Explain the details of Romer's equation (9.6). Why is this an appropriate maximand for a firm?
2. Equation (9.22) can be written $r q(t)=\pi[K(t)]+\dot{q}(t)$. Explain why this is an appropriate equilibrium condition for an owner of capital given that $q$ is the value (price) of a unit of installed capital. Your intuition should consider the interest income available by selling the capital and buying a bond, and the return to owning capital both through productive use and capital gains. (Remember that there is no depreciation in this model.)
