## Economics 314 Daily Question #29

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  $rq(t) = \pi [K(t)] + \dot{q}(t)$ . 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.)