ECON 318, Class 3: Arrow: Allocation of Resources for Invention

1. Read the the introduction.

2. Skim quickly the section “Resource Allocation under Uncertainty;” just read the last paragraph quickly. The “moral factor” is what we now call “moral hazard.”

3. Skim the section “Information as a Commodity.” The most important concept here is incomplete appropriability discussed at the bottom of page 615.

4. Read carefully the section “Invention as the Production of Information.” Draw a flow chart or write an outline showing the reasons why the amount of invention (or information production) is likely to be too low in a market economy.

5. Read carefully the section “Competition, Monopoly, and the Incentive to Innovate.” As you read page 620, draw two conventional monopoly diagrams, with downward-sloping demand, twice-as-steep marginal revenue which is here called $R(x)$, and constant marginal cost. The first diagram is the drastic innovation where the post-innovation monopoly price $p''_m$ is less than the pre-innovation marginal cost $c$. The second diagram is the non-drastic innovation where $p''_m > c$. On each diagram, show the change in profits if a monopolist makes the innovation and if a new-entrant firm makes the innovation.

6. Read the section “Alternative Forms of Economics Organization and Invention.”