

Monopoly 1

I. Single-Pricing Monopoly

Monopoly, as in its common usage, refers to the situation where there is only one seller in the market. The punch line is *a monopolist set the price for its output*. The most basic pricing scheme is to set price to the maximum amount consumers are willing to pay for the output, which is given by the demand curve. So

$$R(q) = p(q) \cdot q$$

where $p(q)$ is the *inverse demand*, which is simply the demand curve expressed in the form of price as a function of quantity. As in perfectly competitive supply we look for

$$MR = MC$$

For linear demand it is easier to understand through a diagram:

- Tip 1: MR curve is a straight line with the same vertical intercept as demand and half the horizontal intercept.
- Tip 2: Equilibrium price is the mid-point/average of the vertical intercept of demand and marginal cost at equilibrium quantity.

There is no simply supply curve for monopoly. This is due to the monopolist's ability to set its own price.

II. Price Discrimination

If the monopolist has more information about the consumers it can do better than single pricing. We now consider three types of pricing schemes called *price discrimination*—the price paid by different consumers are not the identical.