# Firms and markets I

MPA 612: Public Management Economics February 21, 2018



Fill out your reading report on Learning Suite!

### Current events

# Plan for today

Natural monopolies

Paperclips and equilibria

Changes in supply and demand

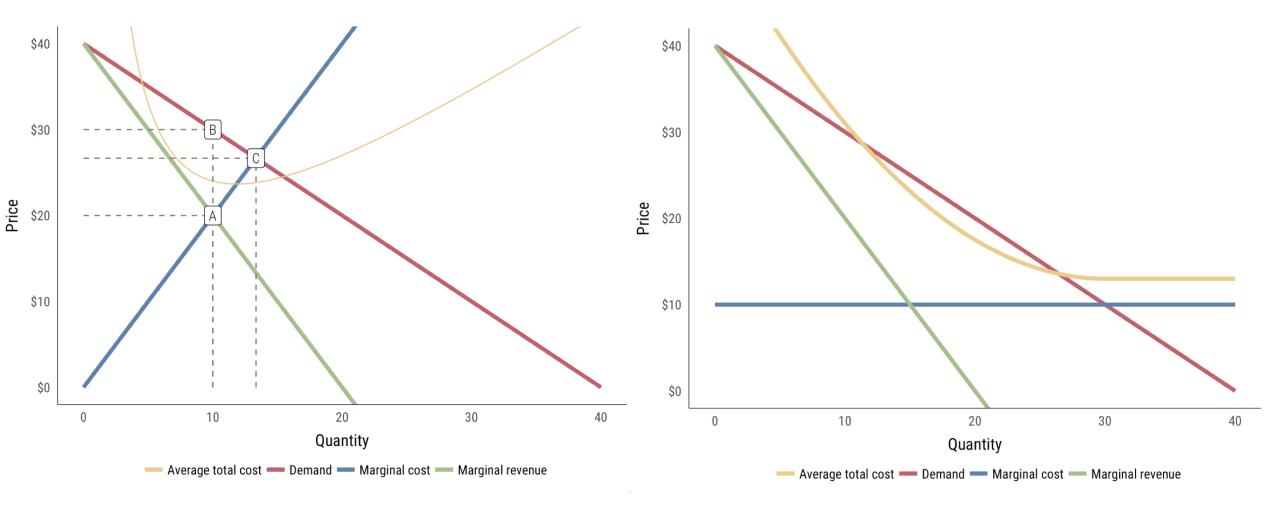
# Natural monopolies

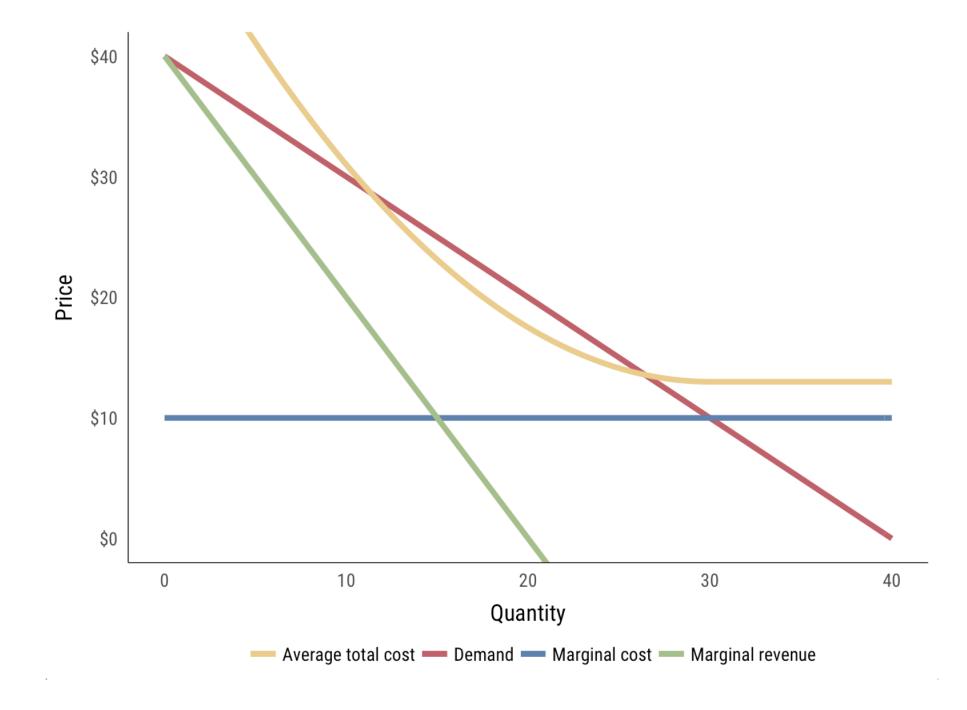
# Natural monopolies

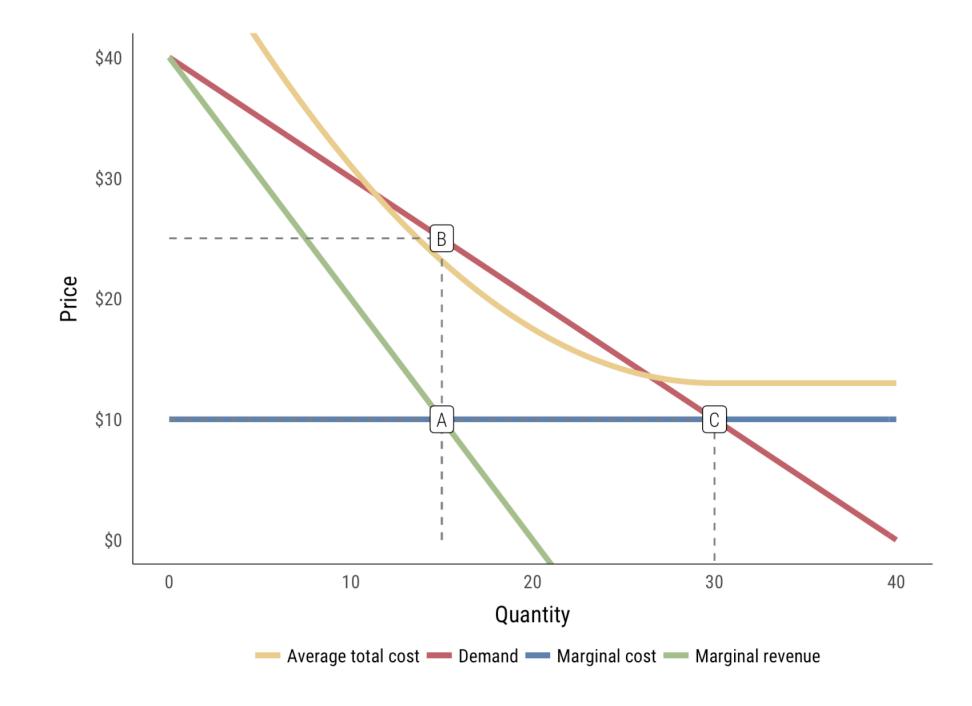
Big expensive things with large capital outlays and low marginal cost

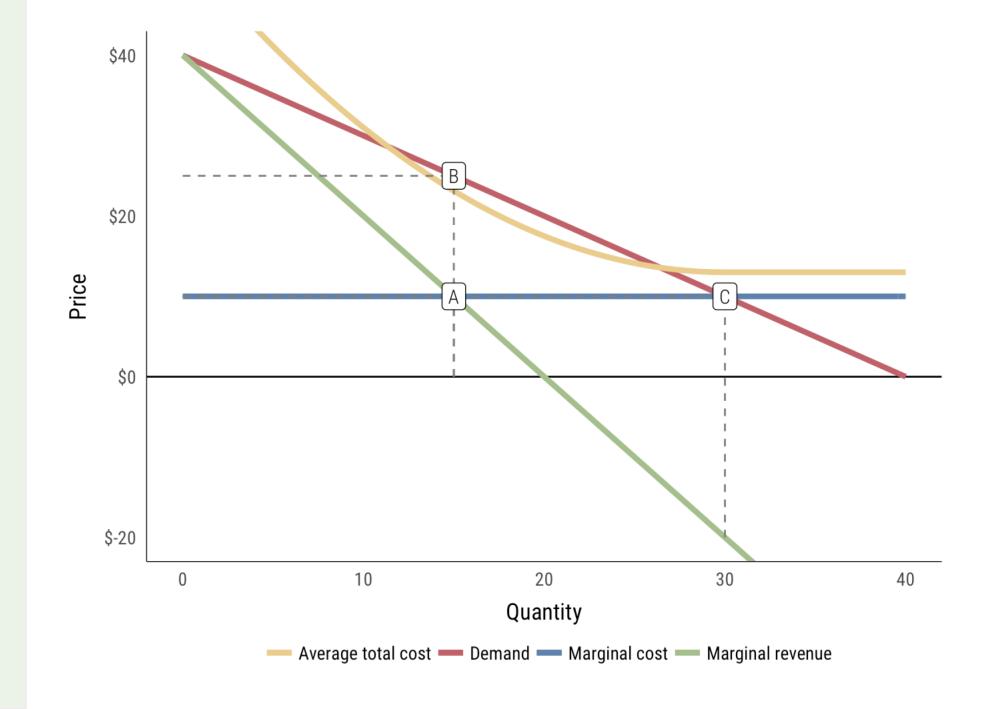
Generally more efficient to just have one firm handle it

Utilities Public transportation









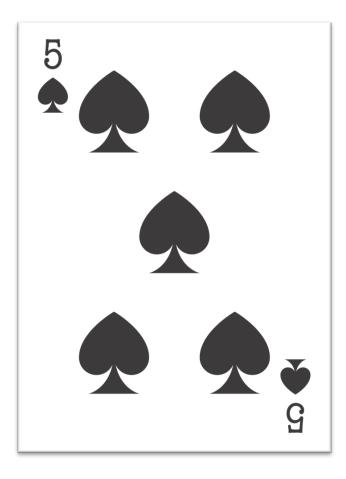
# Paperclips and equilibria

I'm so sorry.

### Sellers

Sell your paperclip for the highest possible price

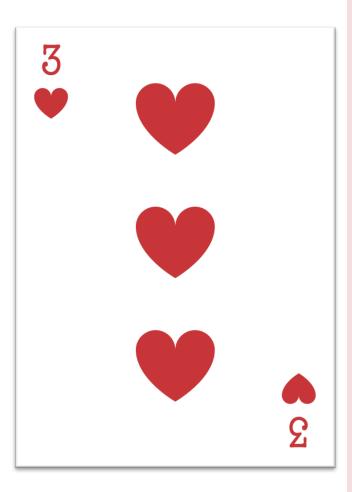
# = your TC. You cannot sell below this number.



# Buyers

Buy a paperclip for the lowest possible price

# = your WTP. You cannot pay above this number.



### Negotiate and haggle.

Find a trading partner.
Verify trade at the front.

Track your earnings.

Keep it secret.

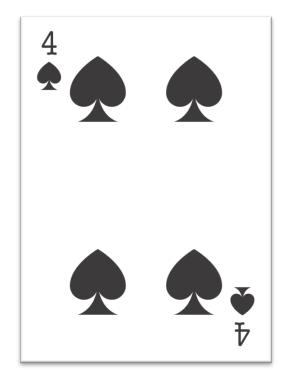
Keep it safe.

### Make the best deal possible.

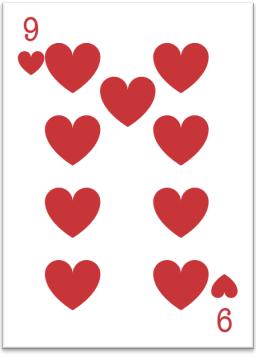
Prizes for sellers who charge high and buyers who pay low.

## Seller









4 pieces of candy

1 piece of candy

## oh noes taxes

The government has imposed a tax of \$2 per paperclip, to be paid by sellers

Sellers who don't sell don't pay tax

Price must be at least \$2 above number on seller's card

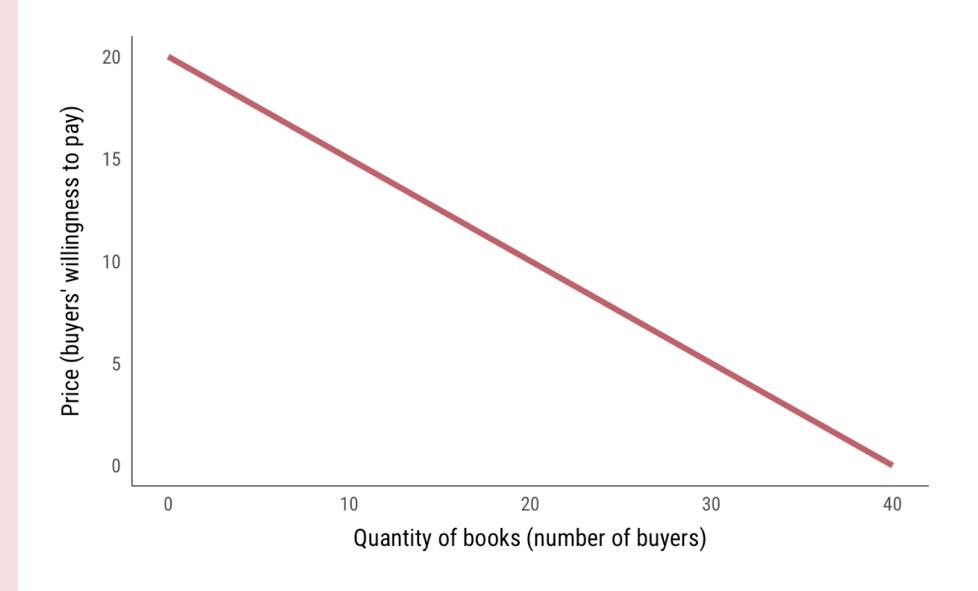
If your card says 4, it's really a 6

# Zoinks! Price ceilings!

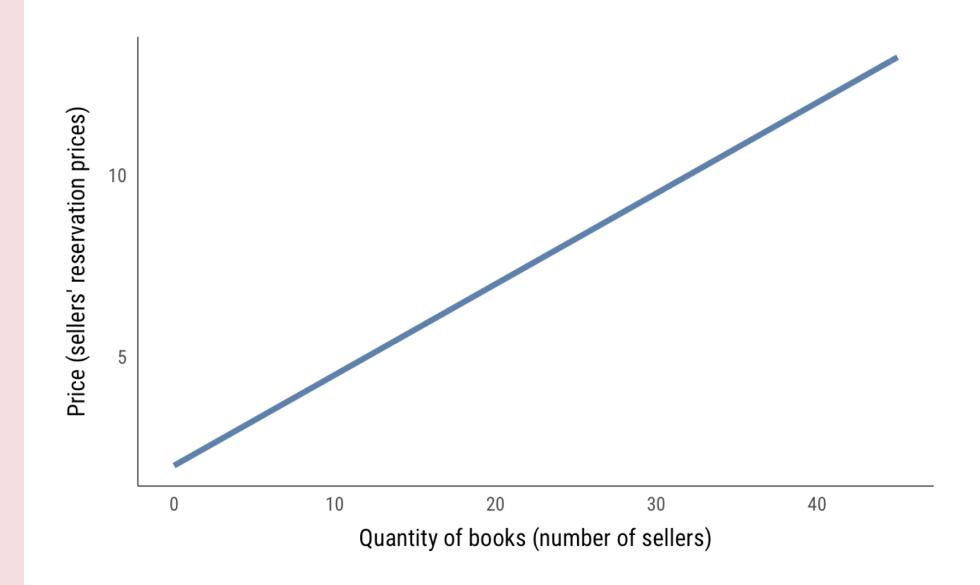
The government has imposed a price ceiling: no paperclip can be sold for more than \$4

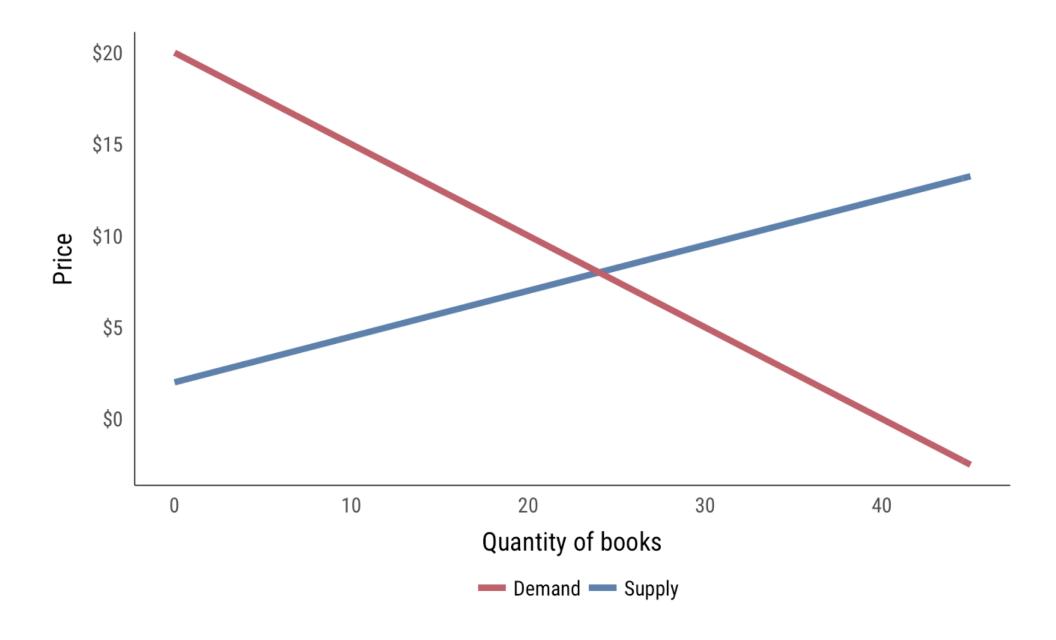
# How'd we do?

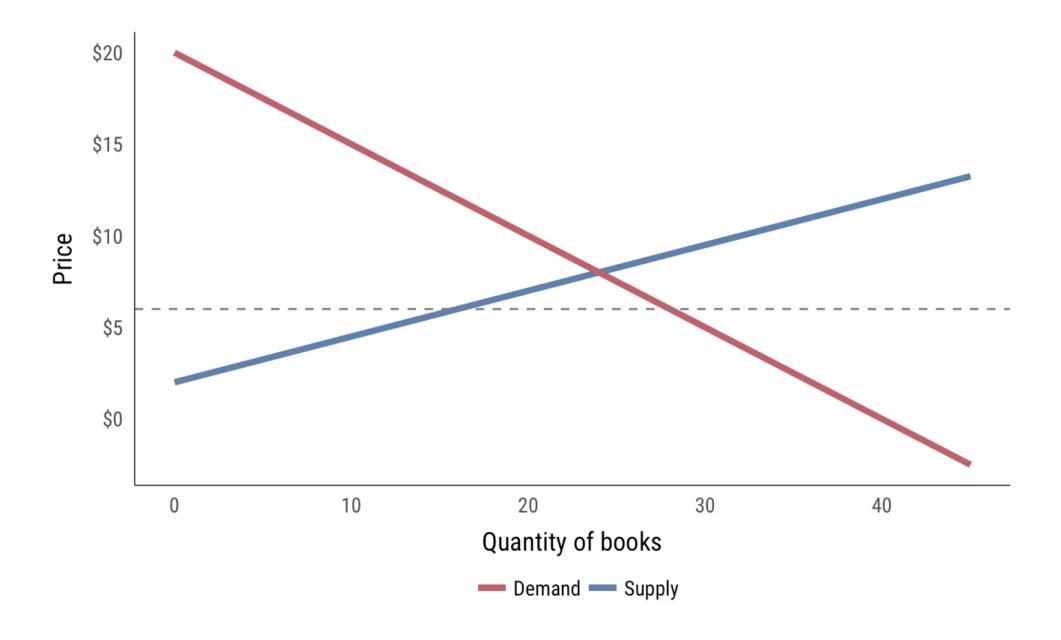
### Demand = WTP = Marginal benefit

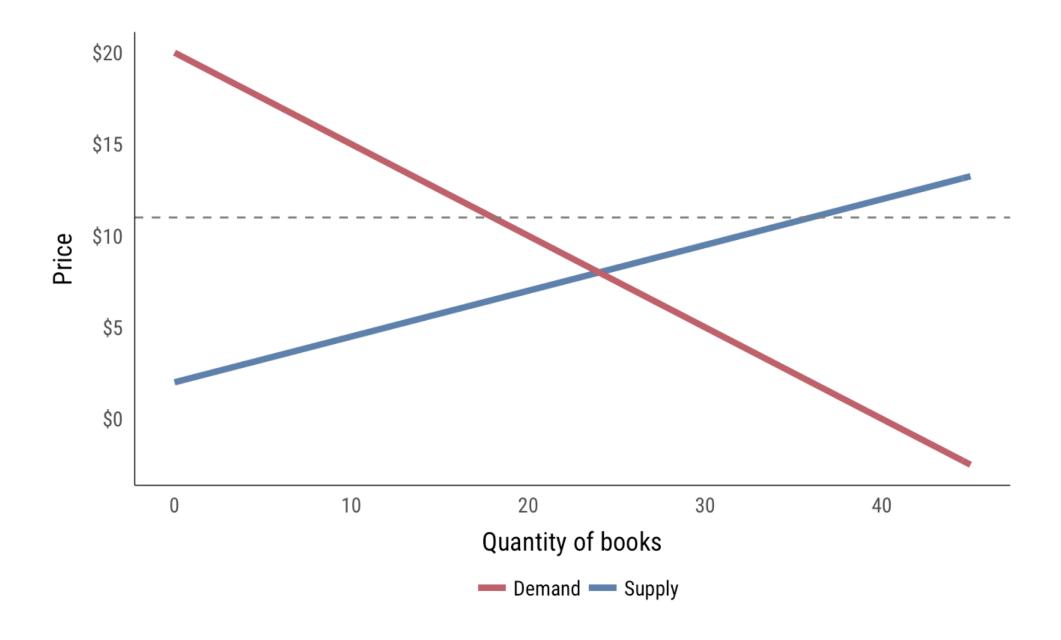


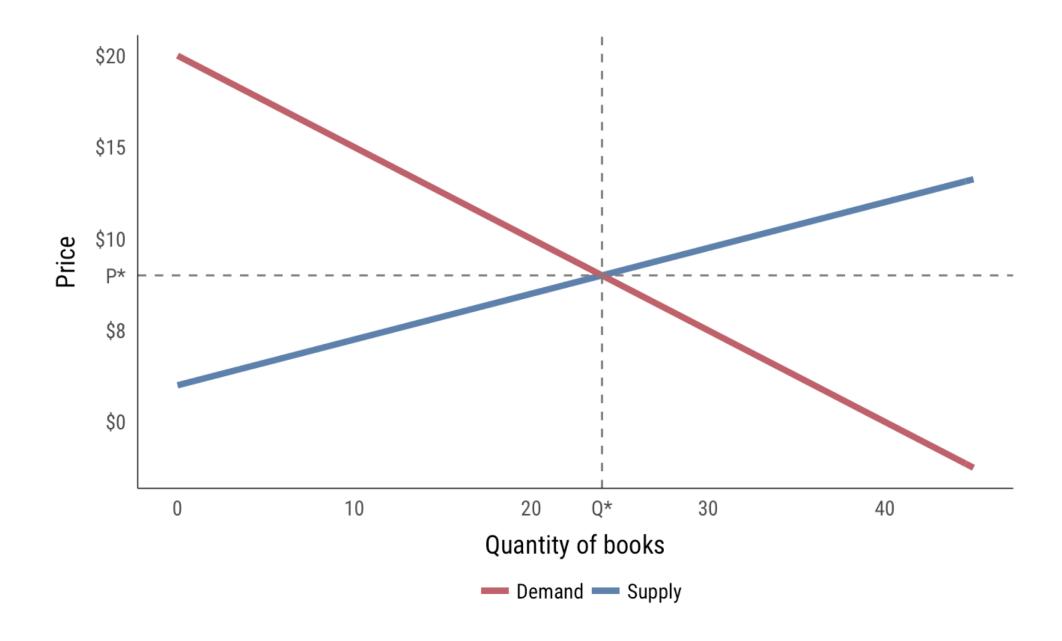
### Supply = WTA = Marginal cost





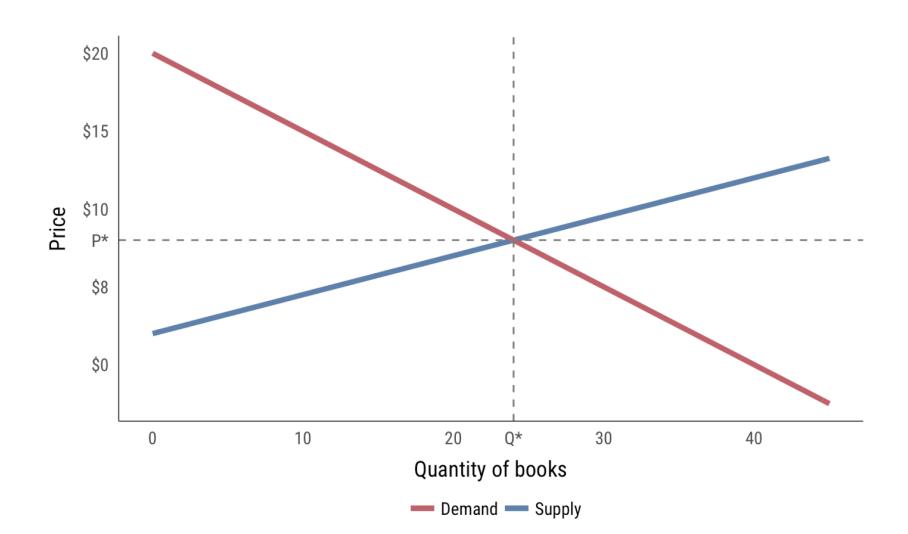






Demand: P = -0.5Q + 20

Supply: P = 0.25Q + 2





#### The Making of a Fly: The Genetics of Animal Design (Paperback)

by Peter A. Lawrence

#### Return to product information

Always pay through Amazon.com's Shopping Cart or 1-Click. Learn more about <u>Safe Online Shopping</u> and our <u>safe buying guarantee</u>.

#### Price at a Glance

List \$70.0 Price:

Used: from \$35.54

New: from

\$1,730,045.91

Have one to sell? Sell yours here





#### Paperclips: 212

Make Paperclip

#### Business

Available Funds: \$ 6.65

Unsold Inventory: 15

lower raise Price per Clip: \$ 0.14

Public Demand: 57%

Marketing Level: 1

Cost: \$ 100.00

#### Manufacturing

Clips per Second: 3

Wire 788 inches

Cost: \$ 15

AutoClippers 3

Cost: \$ 6.33

#### 

Make Paperclip

#### **Manufacturing**

Clips per Second: 0

Unused Clips: 29999.80 sexdecillion

Factories: 3.38 nonillion

#### **Wire Production**

Available Matter: 0 g

(0 g per sec)

Acquired Matter: 0 g

(0 g per sec) Wire: 0 inches (0 inches per sec)

Harvester Drones: 6.76 nonillion Wire Drones: 6.76 nonillion

#### **Space Exploration**

100.000000000000% of universe explored

Launch Probe

Cost: 100.00 quadrillion clips

Launched: 5.00 thousand Descendents: 2.03 decillion **Computational Resources** 

Swarm Gifts: 44 Processors 1467 300 Memory

Operations: 300,000 / 300,000

Creativity: 550,027

**Swarm Computing** Drones: 13.52 nonillion

Status: Active

Next gift in 3 seconds

Work -Think

**Quantum Computing** 

Compute



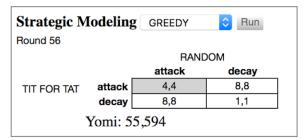


Threnody for the Heroes of Eckmuhl 4

(190,000 creat, 19,000 yomi) Gain 10,000 honor

So We Offer You Exile

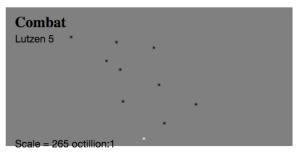
To a new world where you will continue to live with meaning and purpose. And leave the shreds of this world to us...



ON

New Tournament AutoTourney

Cost: 16,000 ops



Honor: 57,247

Von Neumann Probe Design

Trust: 48 / 48 (50 Max)

< > Speed: 7

> Exploration: 6

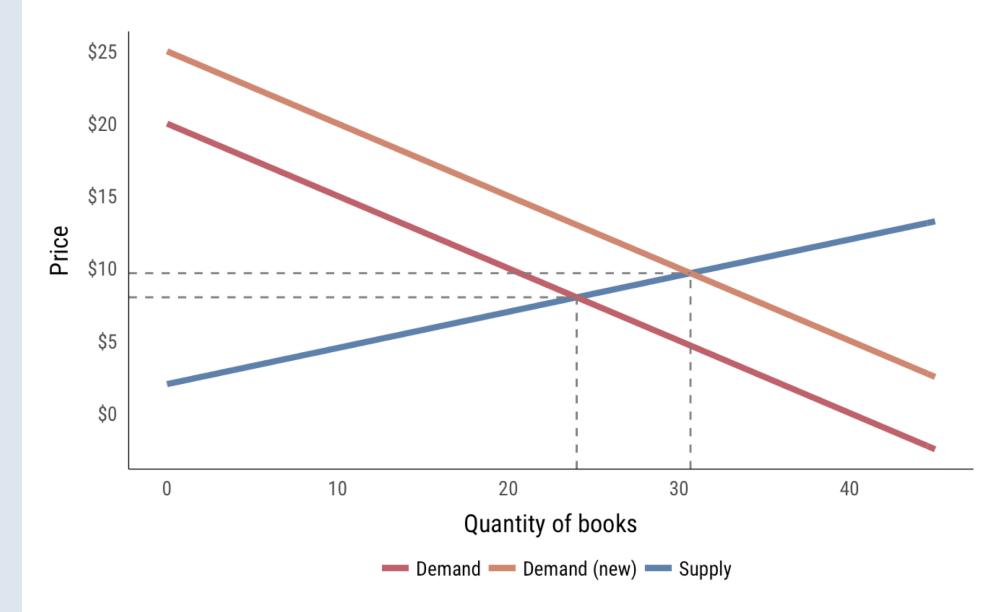
Self-Replication: 12

Hazard Remediation: 10

Factory Production: 1

# Changes in supply and demand

### Change in demand



# Change in demand

Demand higher at every possible point

Structural change

Price increases; quantity increases (or decreases/decreases)

Supply remains the same

People start preferring hamburgers over pizza

# Change in quantity demanded

Prices and quantity change...

...but not because of structural issues

Movement along demand curve

Supply remains the same

Price of pizza changes

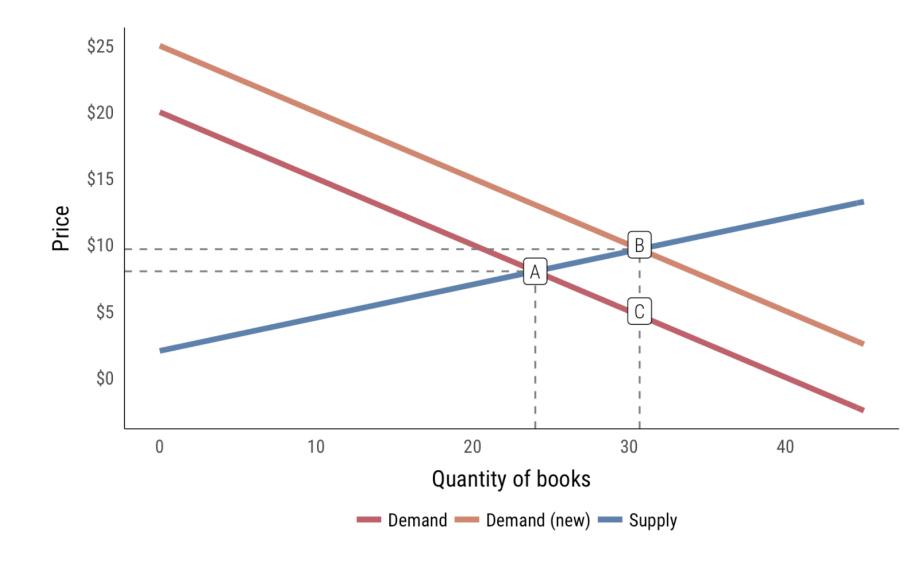
# Two ways to get from 24 to 17ish

A → C

Change in quantity demanded

Only price changes

A → B
Change in demand
New demand curve



### Factors that cause demand to shift

Change in price of complementary goods

Change in income

Change in price of substitute goods

Change in preferences

Change in population of buyers

Expectation of higher prices

C

Orange market Dr. Oz promotes new fad diet where everyone eats 10 oranges a day

Car market Consumer income rises

Car market Gas prices double

Shoe market More manufacturers make shoes

Lettuce market Price drops by 10 cents

### Next time

Surplus and distributional issues

Taxes

More imperfect competition

PS 5 posted on Friday

Midterm posted next Friday