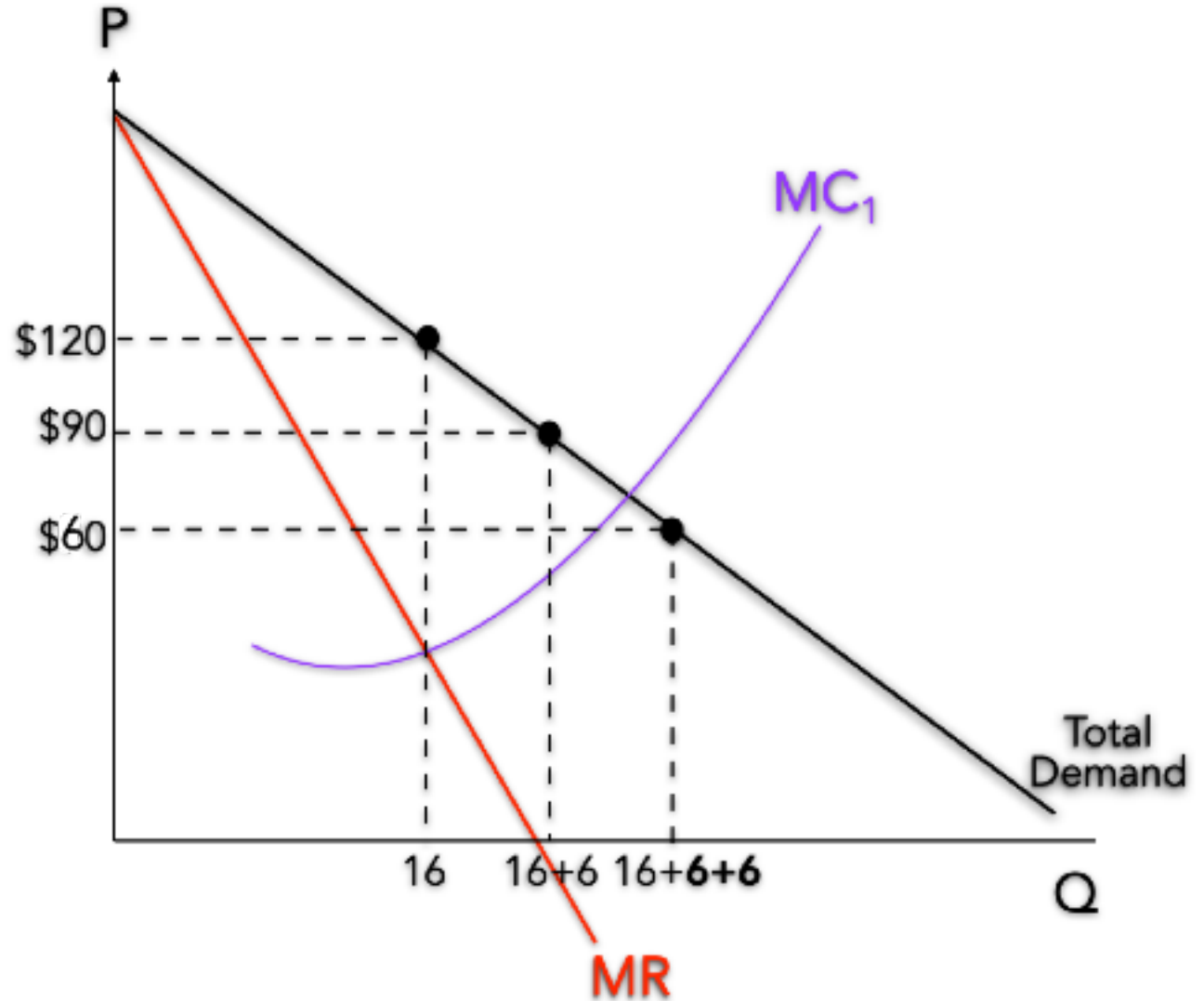
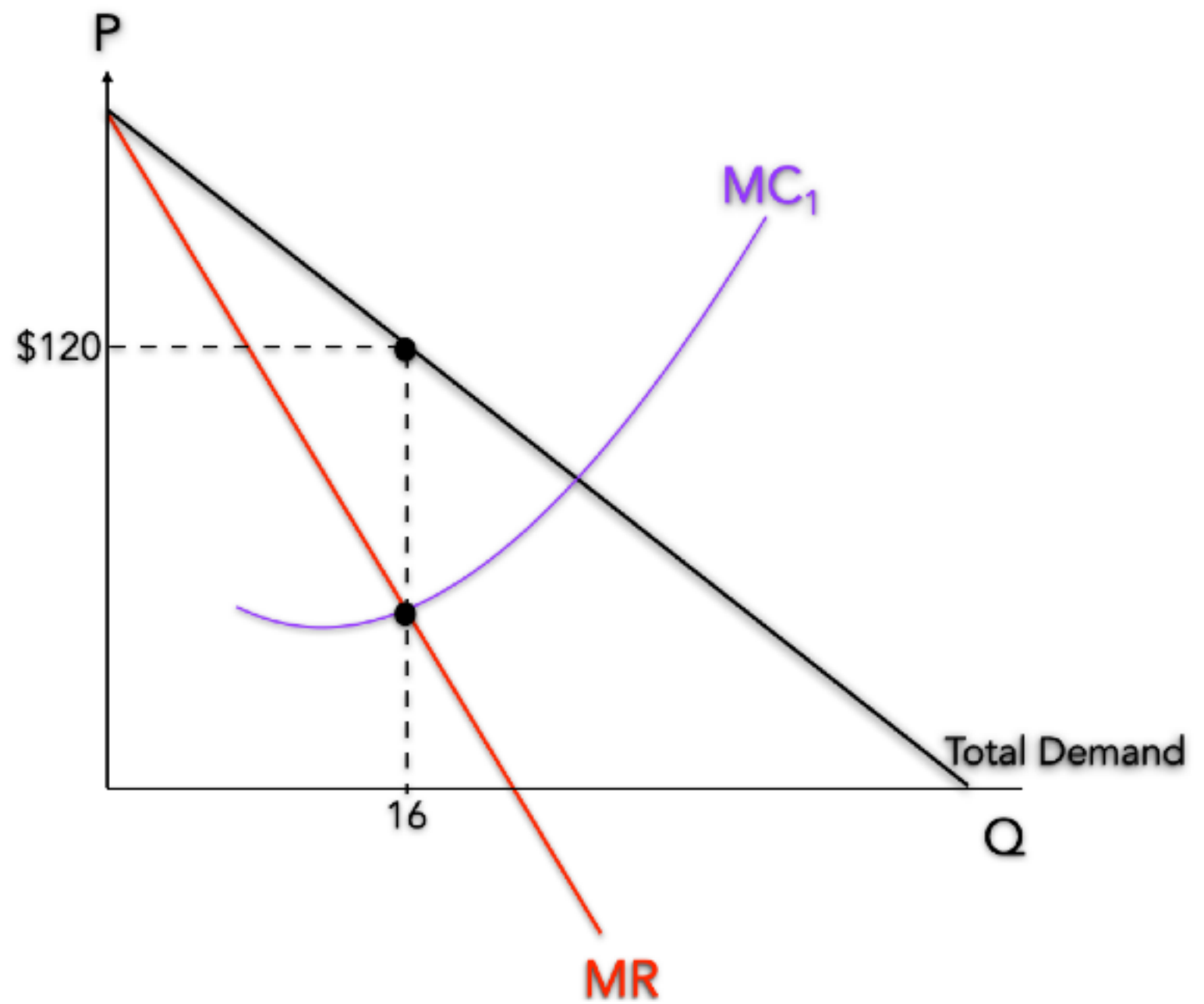
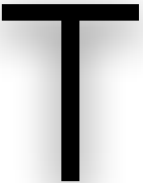

P
MC1
$120
$90
$60
Total Demand
16
16+6
16+6+6
Q
MR

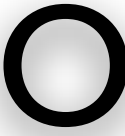
# Revenues

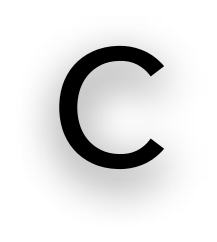

P
MC1
$120
Total Demand
16
Q
MR

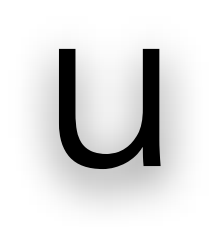
# To cooperate or not to cooperate?

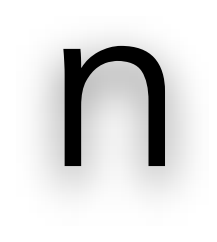


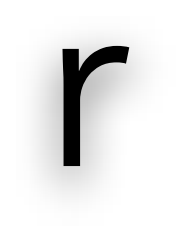
W

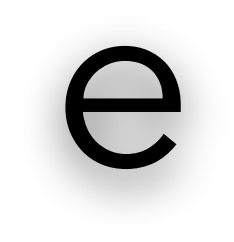



C

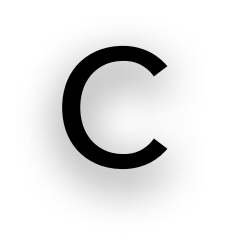


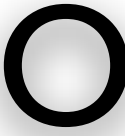

n

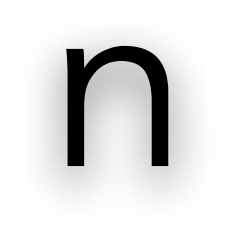


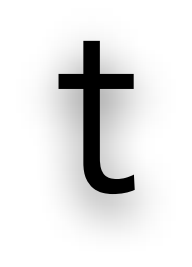


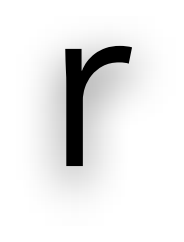
S

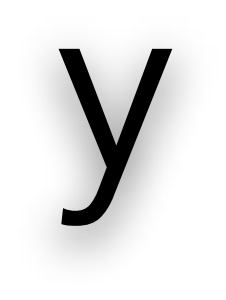

C

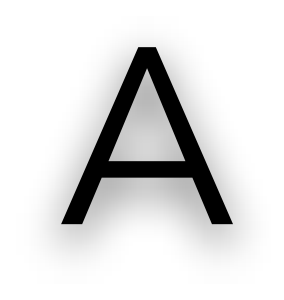


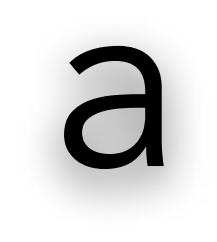


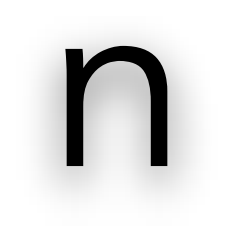

t

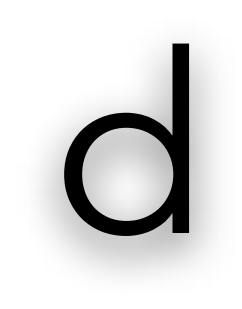

r

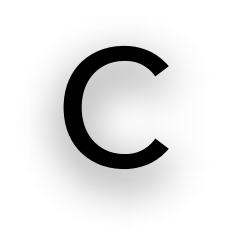

y

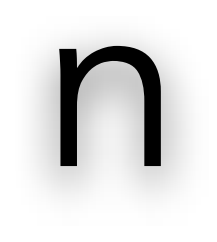


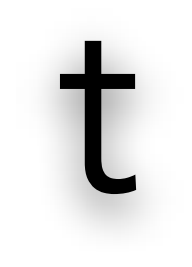

a

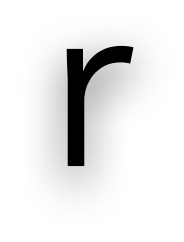


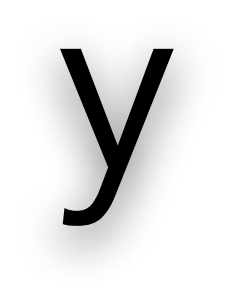


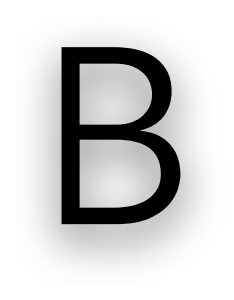


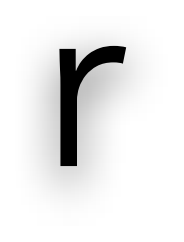

n

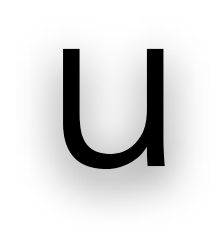

t

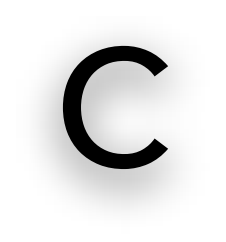


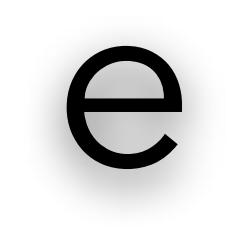

y

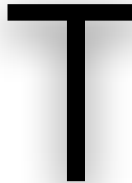


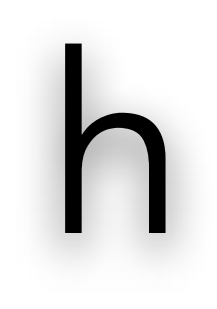

r

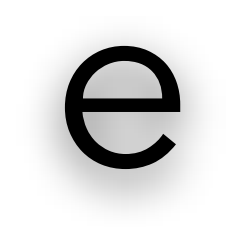


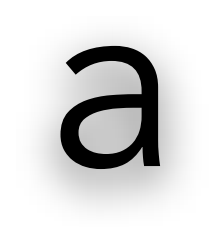

C



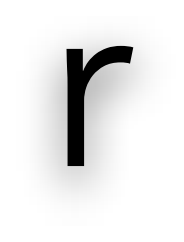


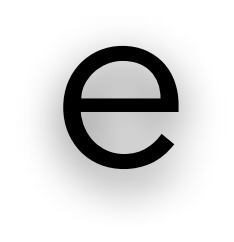

h

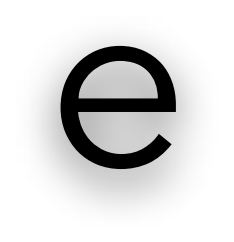


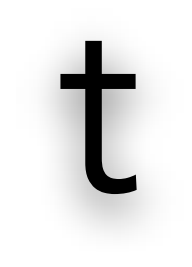

a

g

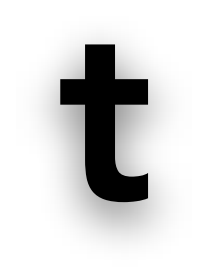


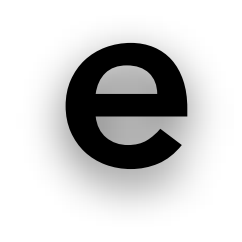




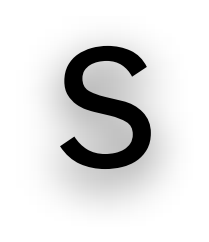

t

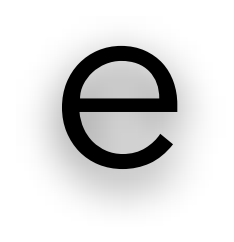
a

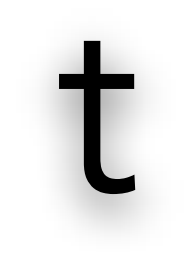




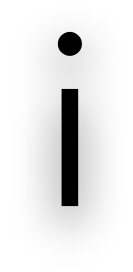
t

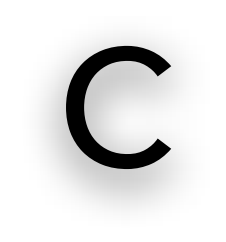


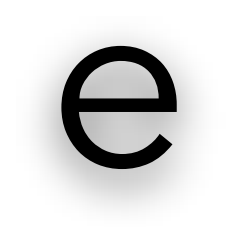


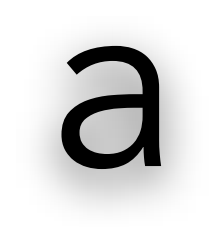

t

r

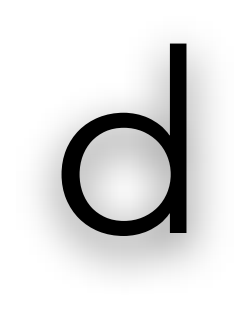


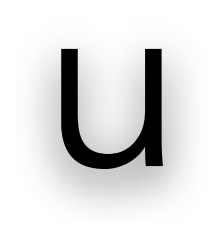





a

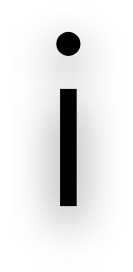
n

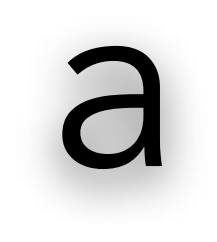




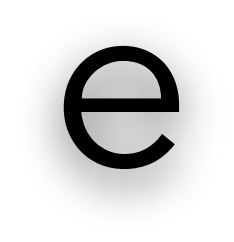
a

n



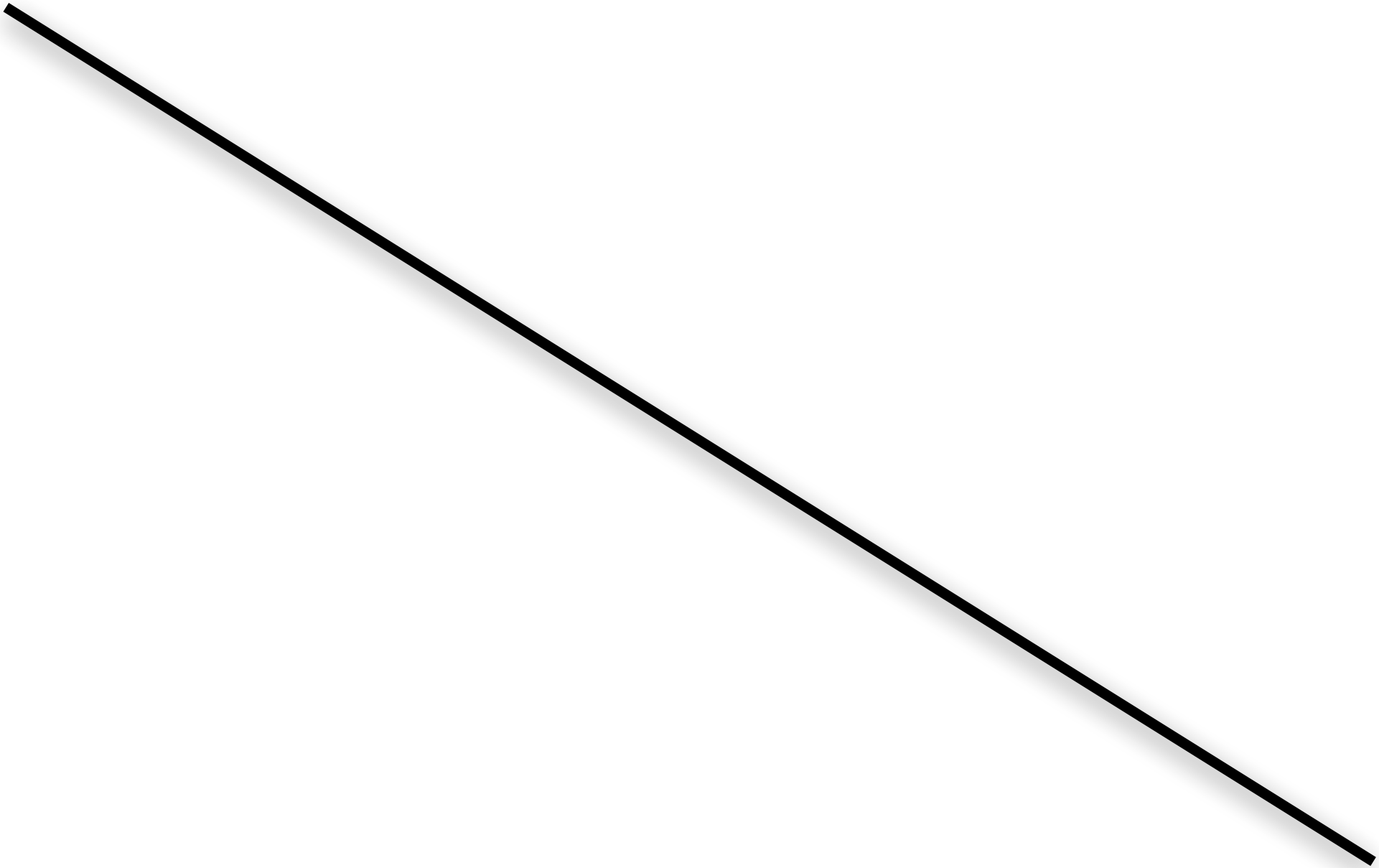

a

S



If country A cooperates

If country B cooperates



A gets:

$960

B gets:

$960

# If country B cheats

# If country A cheats

A gets:

$840

B gets:

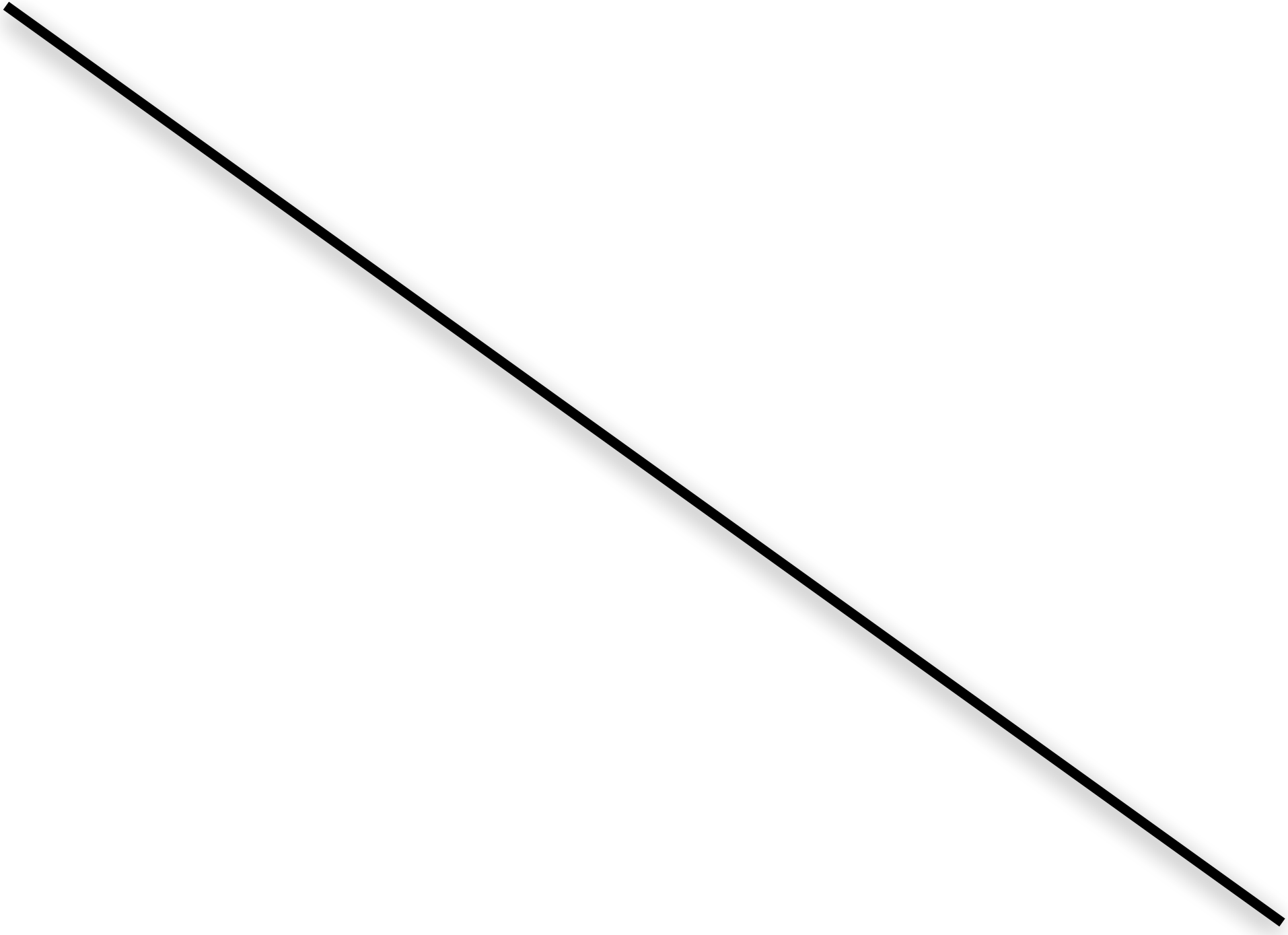
$840

A gets:

$1,260

B gets:

$720

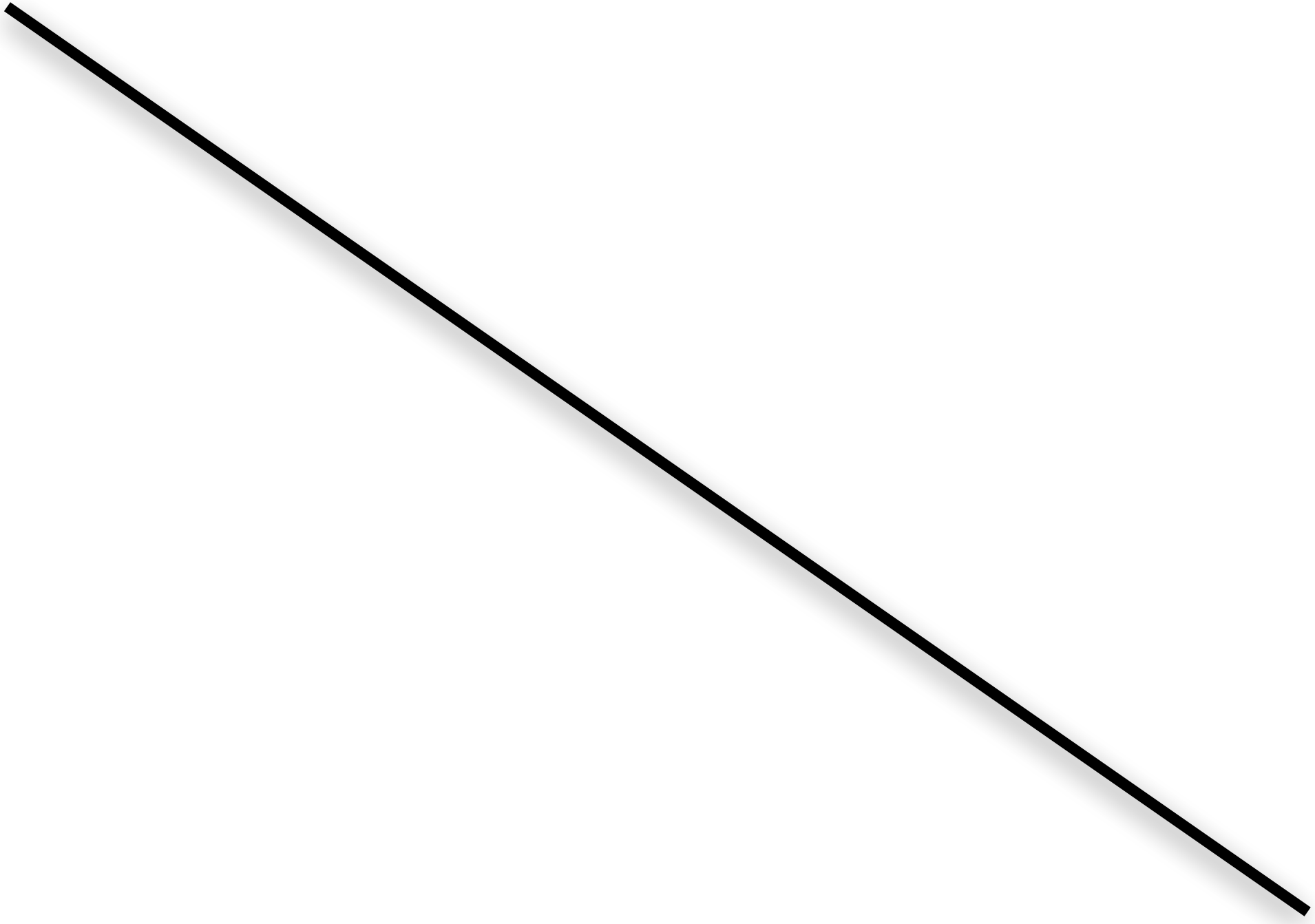


A gets:

$720

B gets:

$1,260

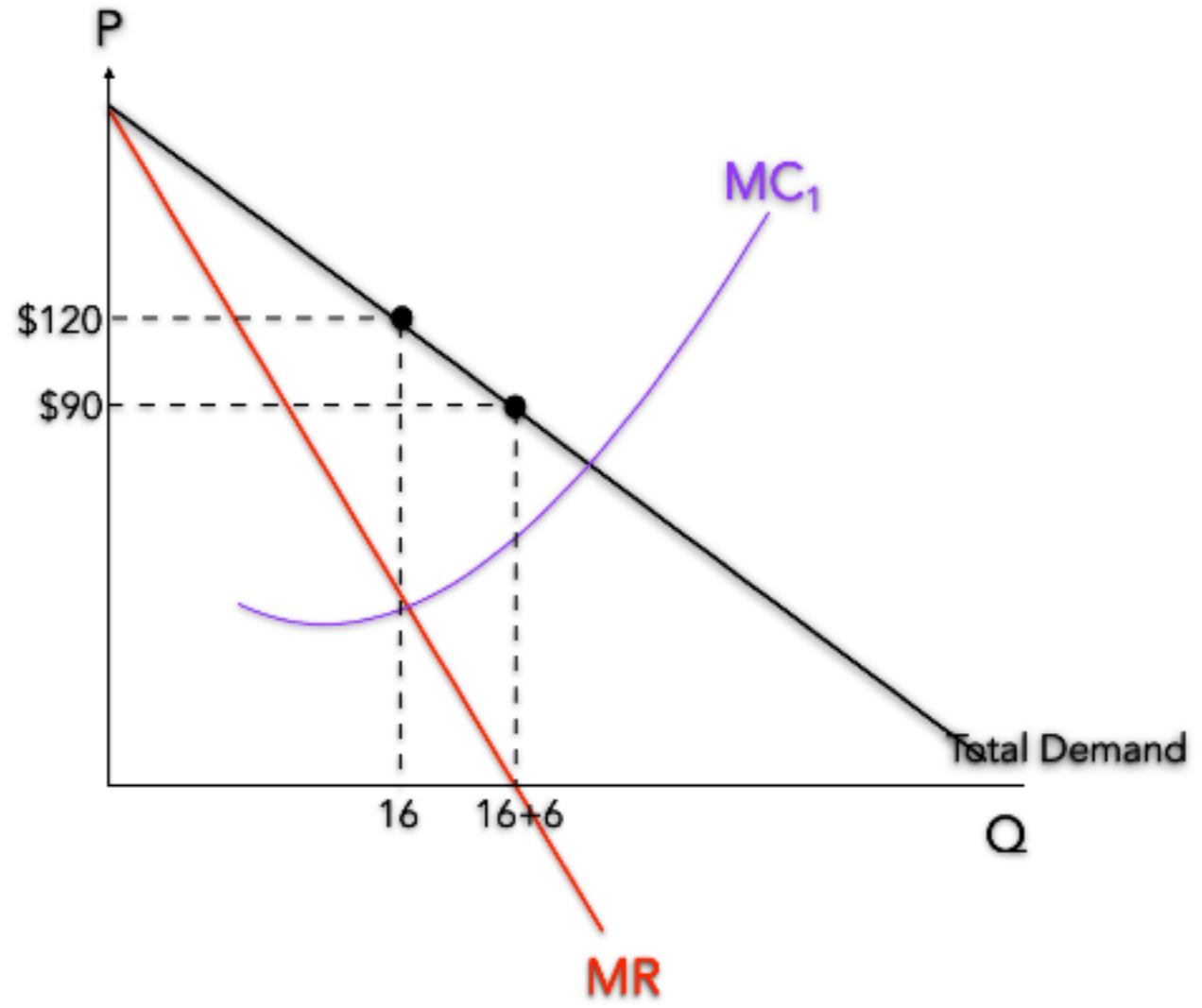


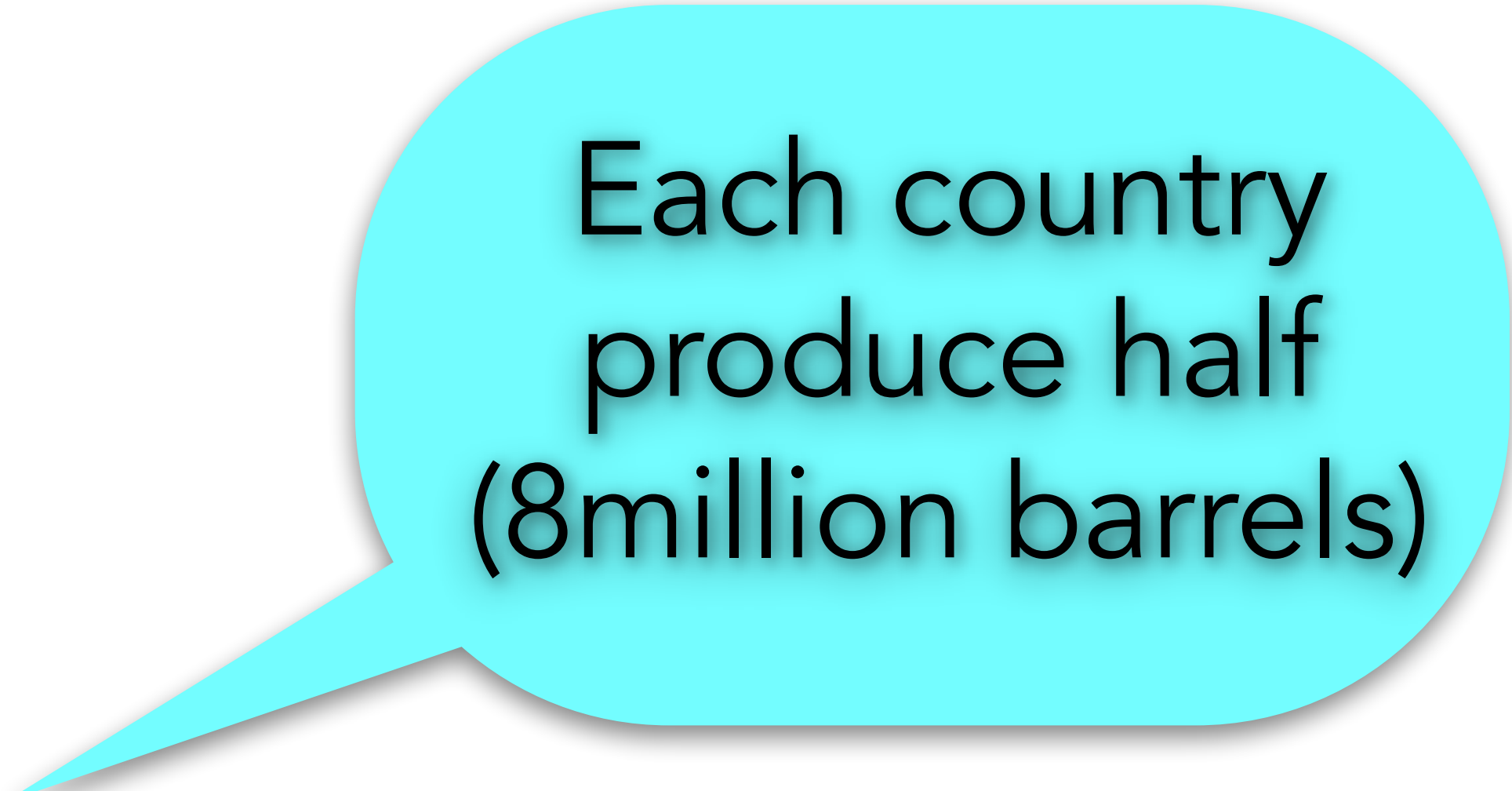
Total Revenue

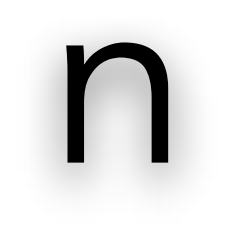
= 120x16

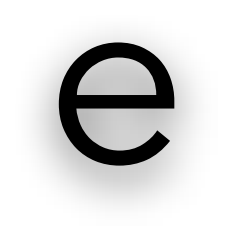
=$1,920

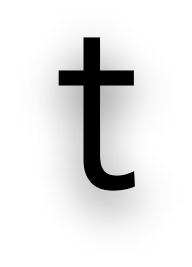
Each country gets half: $960

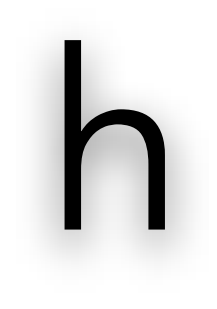

P
MC1
$120
$90
Total Demand
16
16+6
Q
MR

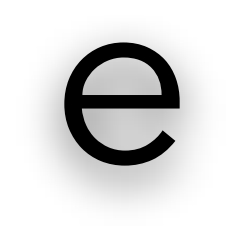

Each country
produce half
(8million barrels)

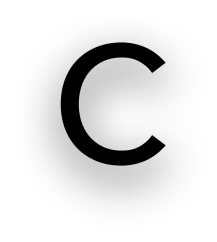


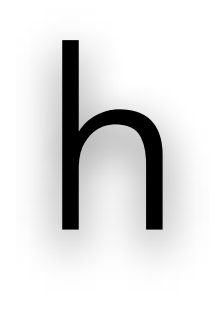


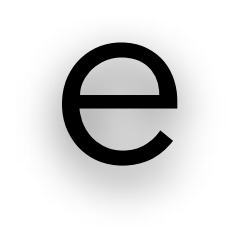




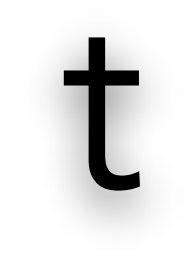


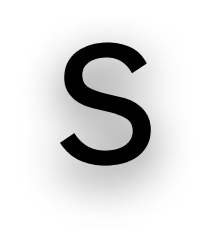

C

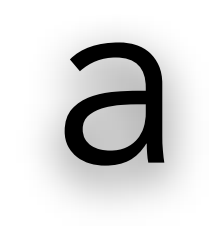


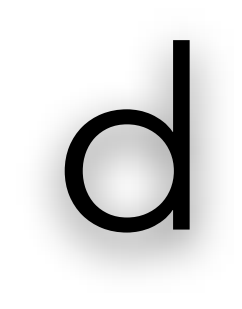


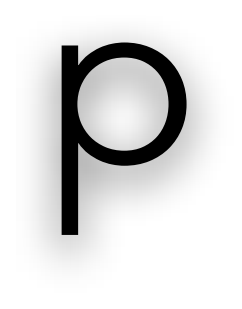
a

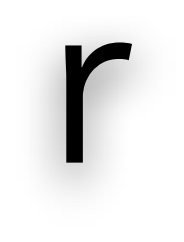


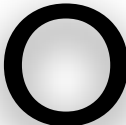


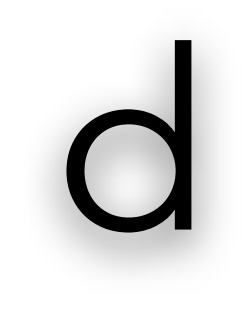

a

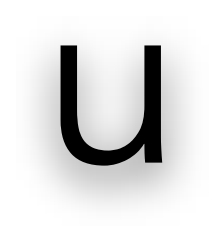


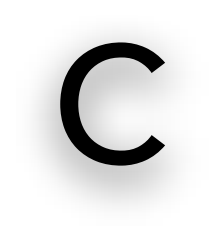


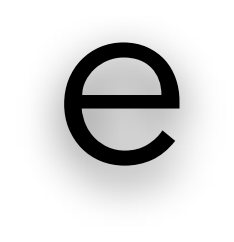








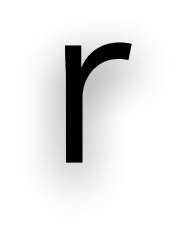


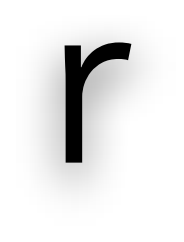


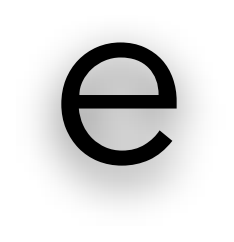
S

6

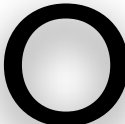
a

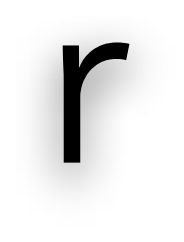

r

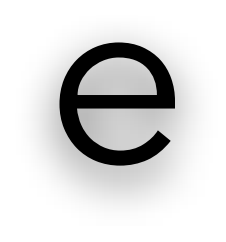


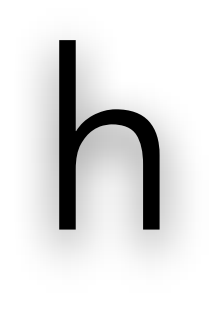


m

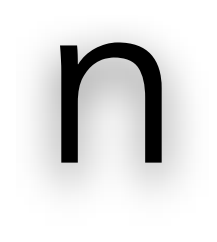


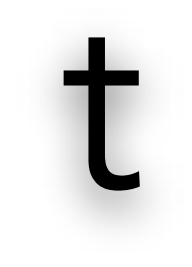


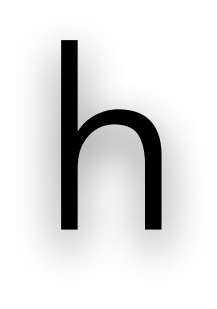


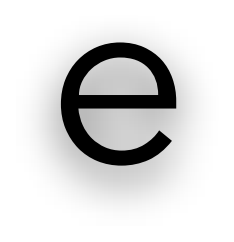

h

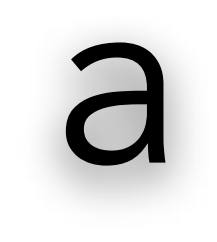
a

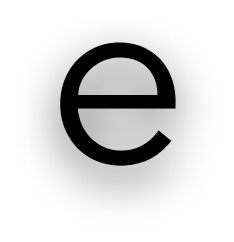

n

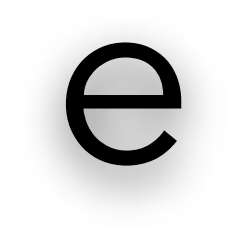


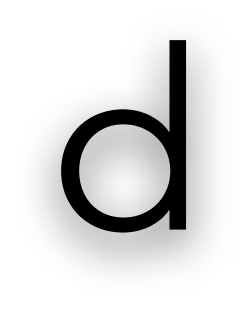


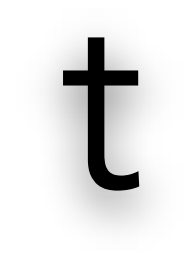


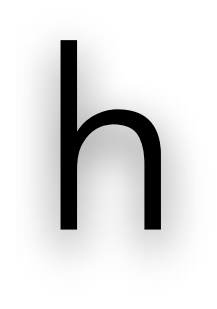

a

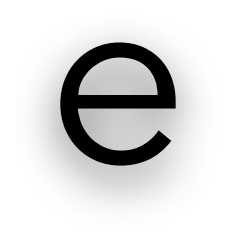


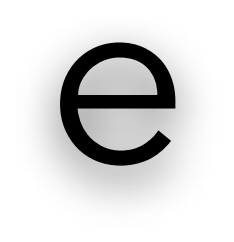












a

One country produce 8m as agreed, the other country produces 6m barrels more

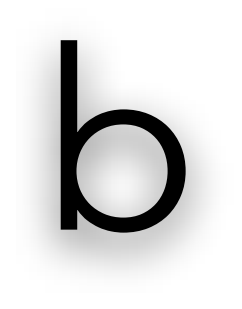
Revenue for **8** million barrels = 90 x 8 =$720

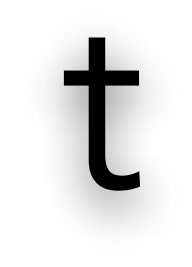
Revenue for **14** million barrels = 90 x 14 =$1,260

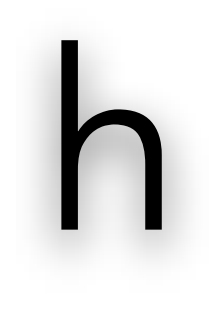
If country A cooperates

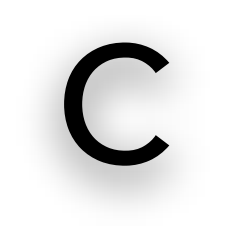
If country B cooperates

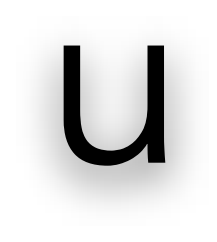
# If country A cheats

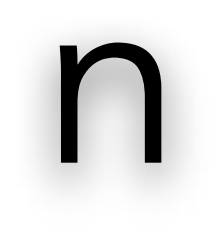


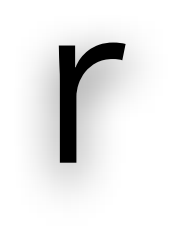


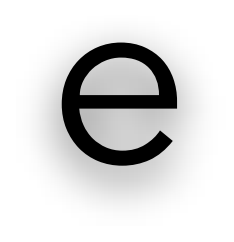



C

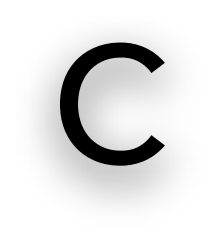


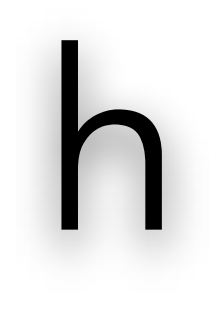

n

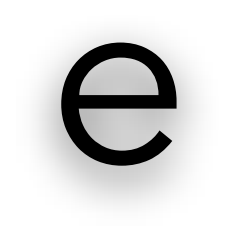


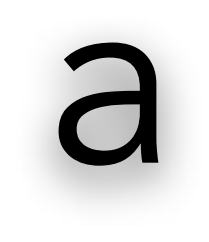


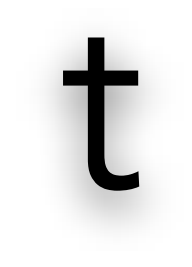
S

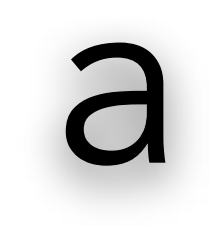

C

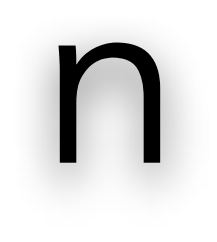


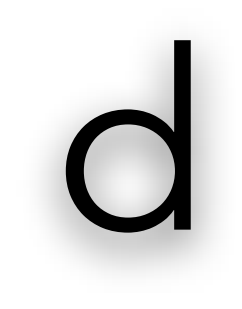


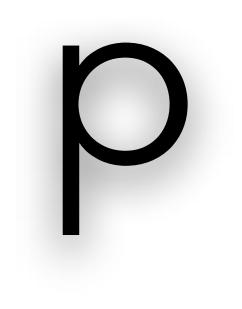

a

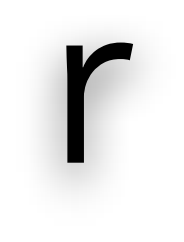


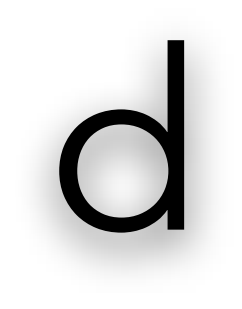

a

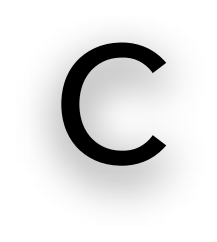

n

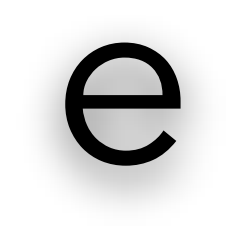


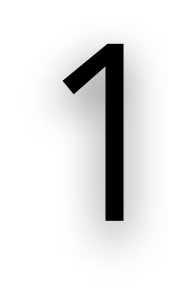






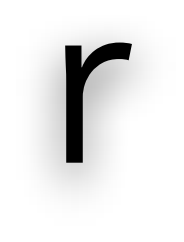


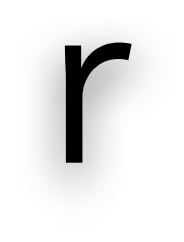


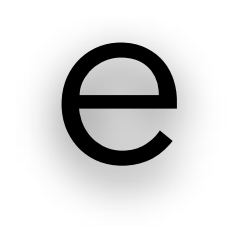


4

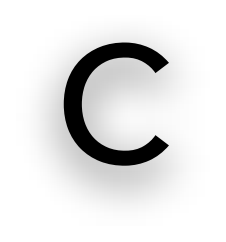
a

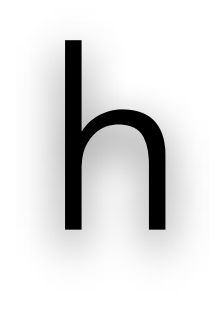


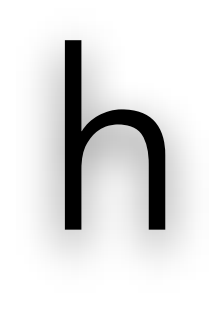


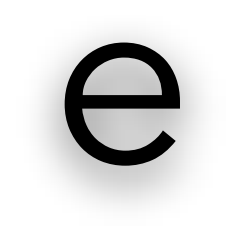


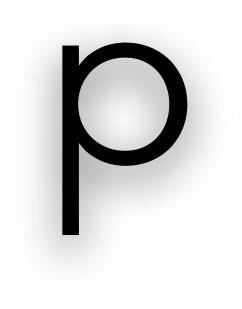
a

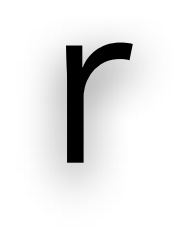


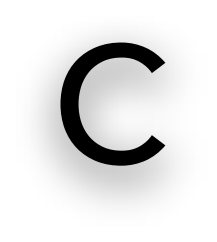


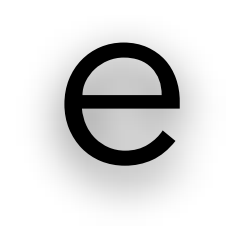




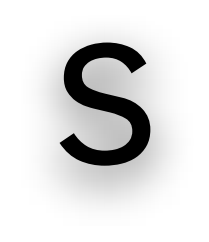


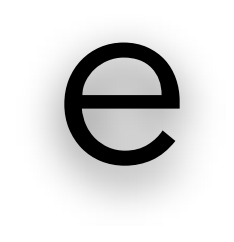


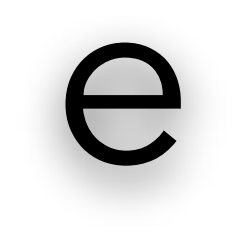


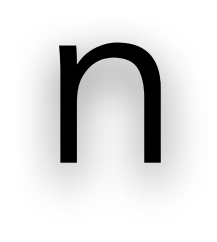


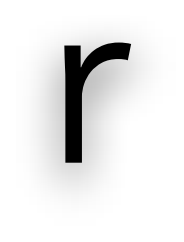
a

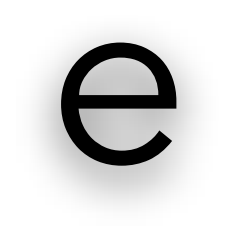












Revenue for **28** million barrels = 60 x 28 =$1,680

Each country gets half: $840

Both countries cheat: each produce 6m barrels more

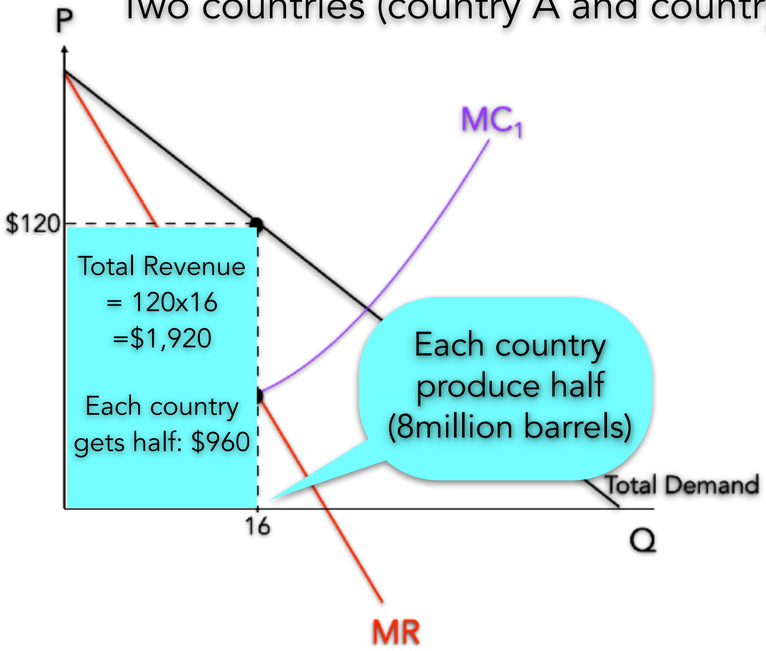
Two countries (country A and country B) produce oil. They agree to **cooperate** to set price and quantity as one:

If one of them cheats and produces 6m barrels more than the 8m agreed, the price falls:

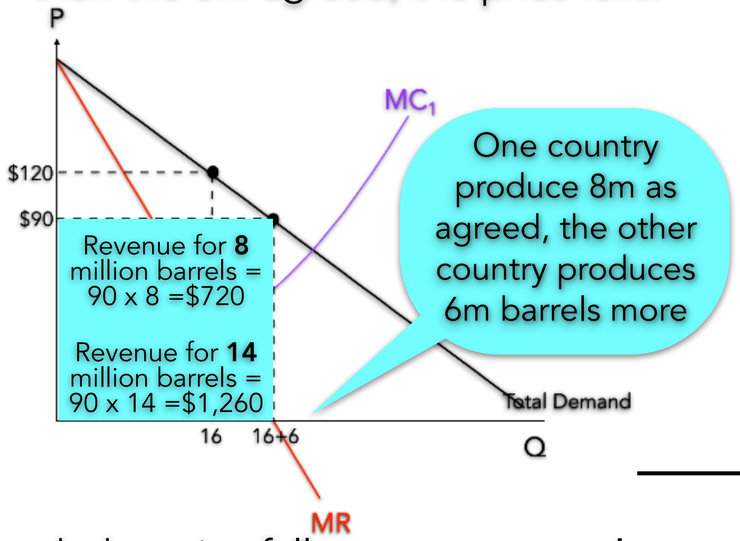
If both countries cheat and produce 14m barrels each the price falls even more:

# To cooperate or not to cooperate?

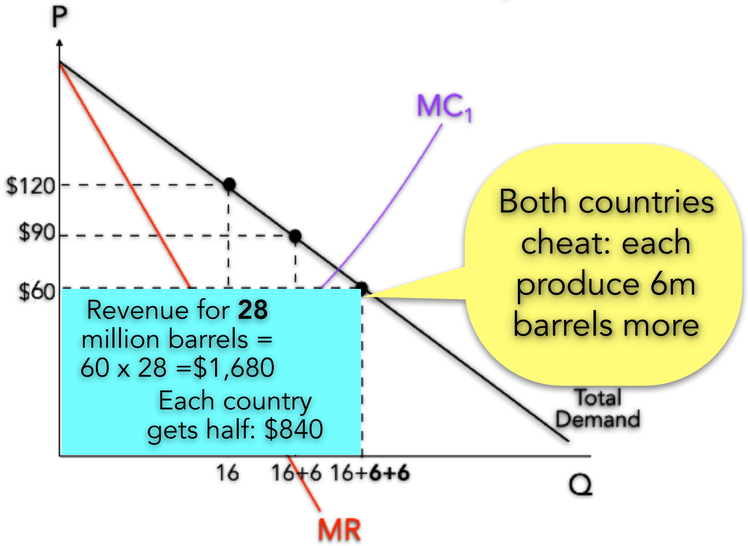
Two countries (country A and country B) produce oil. They agree to **cooperate** to set price and quantity as one:




If one of them cheats and produces 6m barrels more than the 8m agreed, the price falls:




If both countries cheat and produce 14m barrels each the price falls even more:




Revenues

| | If country B cooperates | If country B cheats |
|---|---|---|
| If country A cooperates | B gets: $960<br>A gets: $960 | B gets: $1,260<br>A gets: $720 |
| If country A cheats | B gets: $720<br>A gets: $1,260 | B gets: $840<br>A gets: $840 |

Let's find the best strategy for Country A

| | If country B cooperates | If country B cheats |
|---|---|---|
| If country A cooperates | B gets: $960<br>A gets: $960 | B gets: $1,260<br>A gets: $720 |
| If country A cheats | B gets: $720<br>A gets: $1,260 | B gets: $840<br>A gets: $840 |