Nasdag "bid" acice b	- sell it to women broker
"466" 1650 a	- buy it from Marker boker
Price invariants	in \$1/8
Christy 3 School	2 1994: 85°4 of prices
	.25 .50 .75
	Am Mey ended in , 125 , 375
.625 and .	1. 21 1
	I S is high Emmis lesson
n maket makers	V V
each chose airbi	b. 7 38:18 7
investor buys at pine	a-min ai
intshif sells at price	b= maxbi toll politice 27
Supply 3 demand volumes.	es 5(6), P(a)
	complete one was impressed in
True accet value V=p	Supplie
broker podett:	120-54 MARCHE STO 3
(v-a) O(a) or	5(6)=-80+56
(6-4) 5661	
material in the form	made how should pather are not
quantities in lok share	
for the Art and a	The second secon
It single price a-b-p	
m-that would clear at	v.
5(1) - 0(0)	
-80+50 = 120-50	
100 = 200	
1-20	

```
1441 + 144 +11/B
Collusion?/Monopoly
 Choose b to maximize:
     56) (v-b) = (56-8) (20-6)
     FOC: 5(20-6) - (56-80) = 0
         ; f 100-56 = 56-80
               180=106
                  18=6
 Choose a to maximize:
    (a-v)D(a) = (120-5a)(a-20)
    FOC: -5 (a-20)+(120-5a) = 0 3-13
        120 - Sa = Sa-100
            220 = 10a
              22 = a
                      V=20
5(6) = -80 + 56 = 5(18) - 80 = 10
 O(a) = 120 - 5a = 120 - 5(22) = 10
1 (11, fit) = broker poputt = S(6) (v-b) = (56-80) (20-6)
                              200 = Notato Mais mil
Profit for manpolist: 20 profit for a produces 20/2
TI (10,6+) = for WARAAN MANY = 0(a) (a-v) = (120-50) (4-20)
Profit for monopolist: 20
                          Prokt for no produces 20/2
Total = profit buying + profit selling = 20/1 + 20/1 - 10/1
```

Deviation Profit	BANK WARE
hi =19	Musica IV Menerally as
a;=21	os mixAN of d. Accon.
	10-08)(8-08) = (0-1)(016
Profit from buying = [	5(19)-80] (20-19) = 15
Profit from selling = [17	20-5(21)](21-20)=15-001
Total prist = 30	1 Fe 2001 = 108 1 - 1
	9 = 81
Trigger Pricing: V	STINIXAM OF 10 DECOM
Collusion payoff: _	10 Desigtion payet: 30 + 08
	(1-810= /28-01) HOS-2013-11-507
Sustain Collugion 40	$\rightarrow 30 \rightarrow 4 > 1(1-8)$
nu	1-8)
Avy # of market m	14 kvi n=11 D = SS
$\frac{5}{3}$ $\frac{21}{3}$ = 0.88	and the state of t
-1 6-	Stail Chan Stain
if n=50	01=08-(81)3 = 45+08-=(4)
$\frac{5}{75} = 0.97$	(a) = 120-51 = 120-5(32) = 10
12-00 V 10 12 12 12 12 12 12 12 12 12 12 12 12 12	7 11 or 100
Trigger Pricing: match	- (day (a) = tropes unerd = (tant)
Collusion pegost: 40	Periation payoff: 30 + 3% 5
n(1-8) < \frac{9}{3} - 8	5 45 min: n(1-8) 2 ;
if n=11 model	or in was filed to the fire
55 32 =0.97	
2) /65	101 = 10 1 man + 10 6 mile = 20/+20/

	1 big market worker				
_	m Small market makers (half as large)				
_	Shares 2 Vs. 1 of supplys				
_					
_	- Committee ride				
(	OPEC 954 E 8 8, 103 Costs \$20/6/1011 954 E 85,73 Demand Jourd				
•					
_					
-	Q € \( \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
-	5100, 588, \$76 7 100d				
-	\$64,\$60,\$86 -> hed				
	Good Bud				
	5 7 5 7				
	8 640,400 544,476 54 8 352,220 320,280				
SA	10 680,340 860,342 10 400,200 360,252				
	101310				
	SA profit steam 640 = 680 + 5608/(1-8)				
	College us long as 831/3				
	V pro Kt 400 = 476+ 8392/(1-8)				
	willade us long as 8> 12/21				
	Probability p demand good				
	1-p demand bud				
	Strategies: - higher for sure				
	- high it good -				
	- low it good V				
	- low of for sure				

Cartel: high q in bad year	or and to the policy of A
	9
[640p + 360(1-0)]	finishion + 680 + 560p+ 360(+p)
1-8	ertal ertall-8
Sustain Willusion if 5 1	al Caranellia
1+2	e 55A 3390
The second language	;+ mup p21 } 801,833
1 col 3	10 E E E E E E E E E E E E E E E E E E E
Theorem Picker Visal Si	9 3 V E [1,61,81] 9 D
14	np Det orbited, with
	6-d en 186 00 8, 406