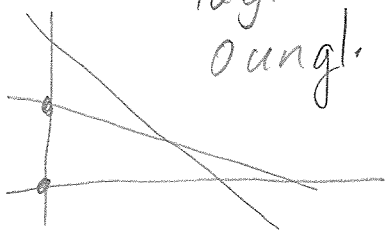
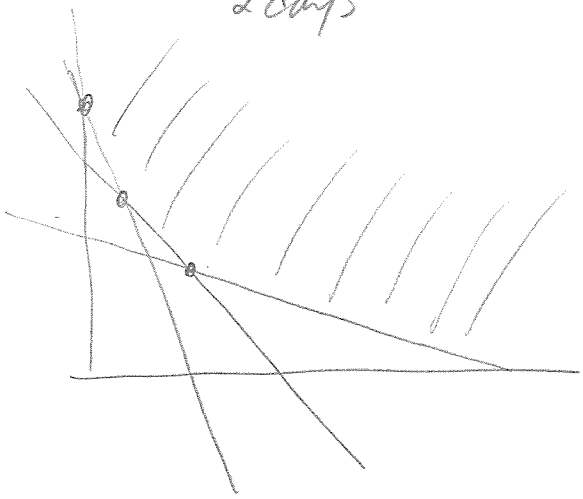
Linear Programming – One last time KEY

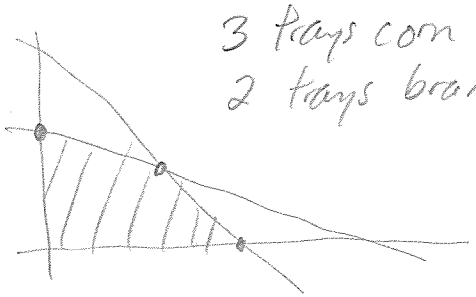
① 12 gl
0 ungl.



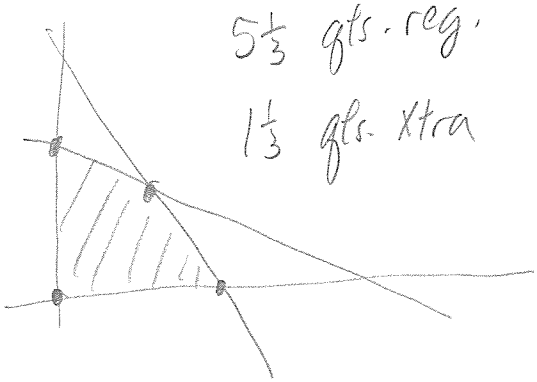
② 4 days
2 days



③ 3 trays corn
2 trays bran



④ $5\frac{1}{3}$ qts. reg.
$1\frac{1}{3}$ qts. Xtra



Linear Programming – One Last Time

① Let x = # glazed planters
y = # unglazed planters

$\frac{1}{2}x + y \leq 6 \longrightarrow (0,6)\ (12,0)$

$x + 6y \leq 24 \longrightarrow (0,4)\ (24,0)$

$1.50x + y = P$

Vertices	Profit $1.50x+y=P$
$(0,4)$	4
$(6,3)$	12
→ $(12,0)$	18

$x + 2y = 12$
$x + 6y = 24$

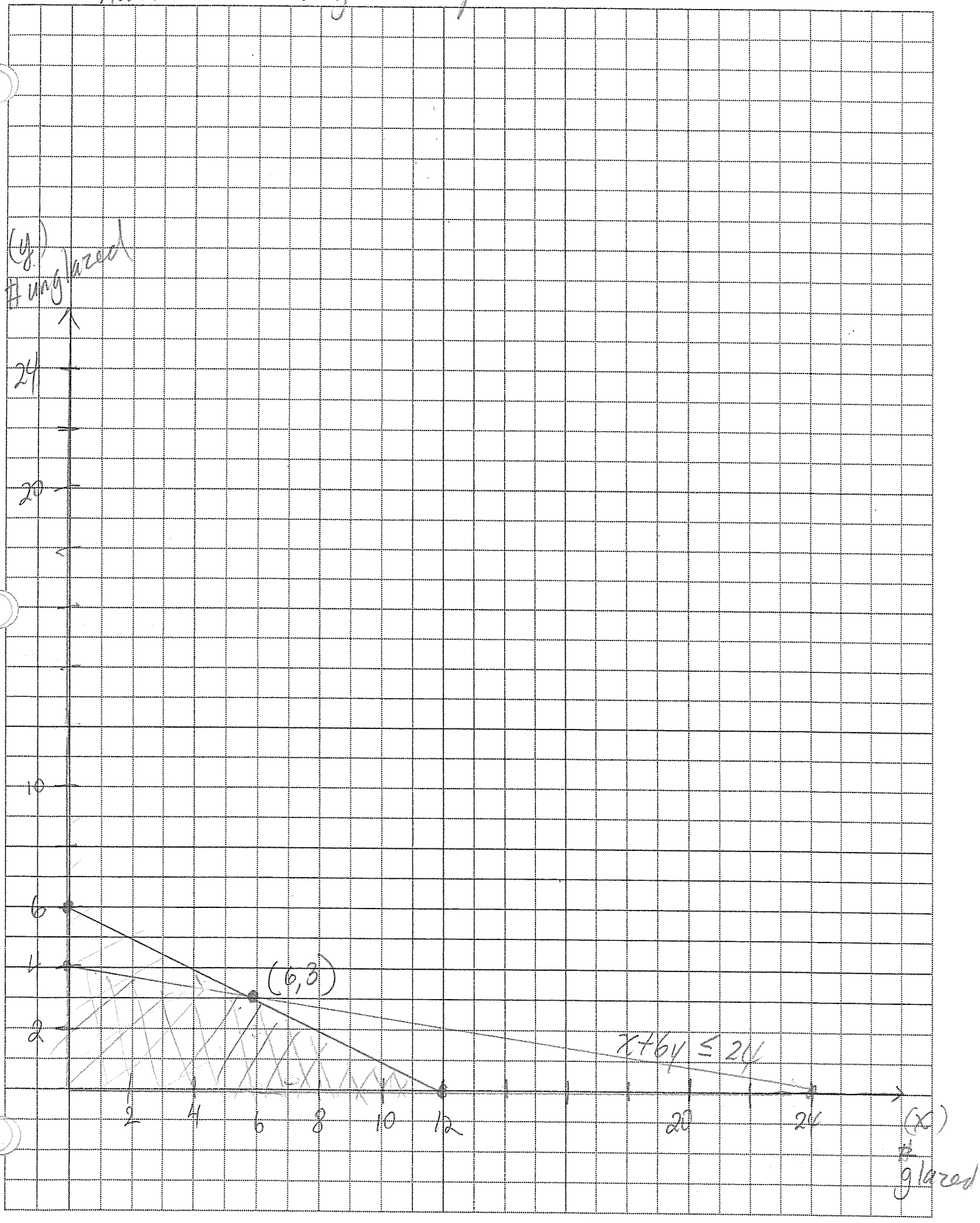
$-4y = -12$
$y = 3$

$x + 6 = 12$
$x = 6$

Answer:

12 glazed and zero unglazed with a profit of #18

Glazed and unglazed planters



② Ark Pharmaceutical Corp.

Let x = # of days at Plant I
y = # of " " " II.

	I	II
Motor	$5x$	y
Nu-tral	x	y
Qurol	x	$4y$

$5x + y \geq 10$ → (0,10) (2,0)

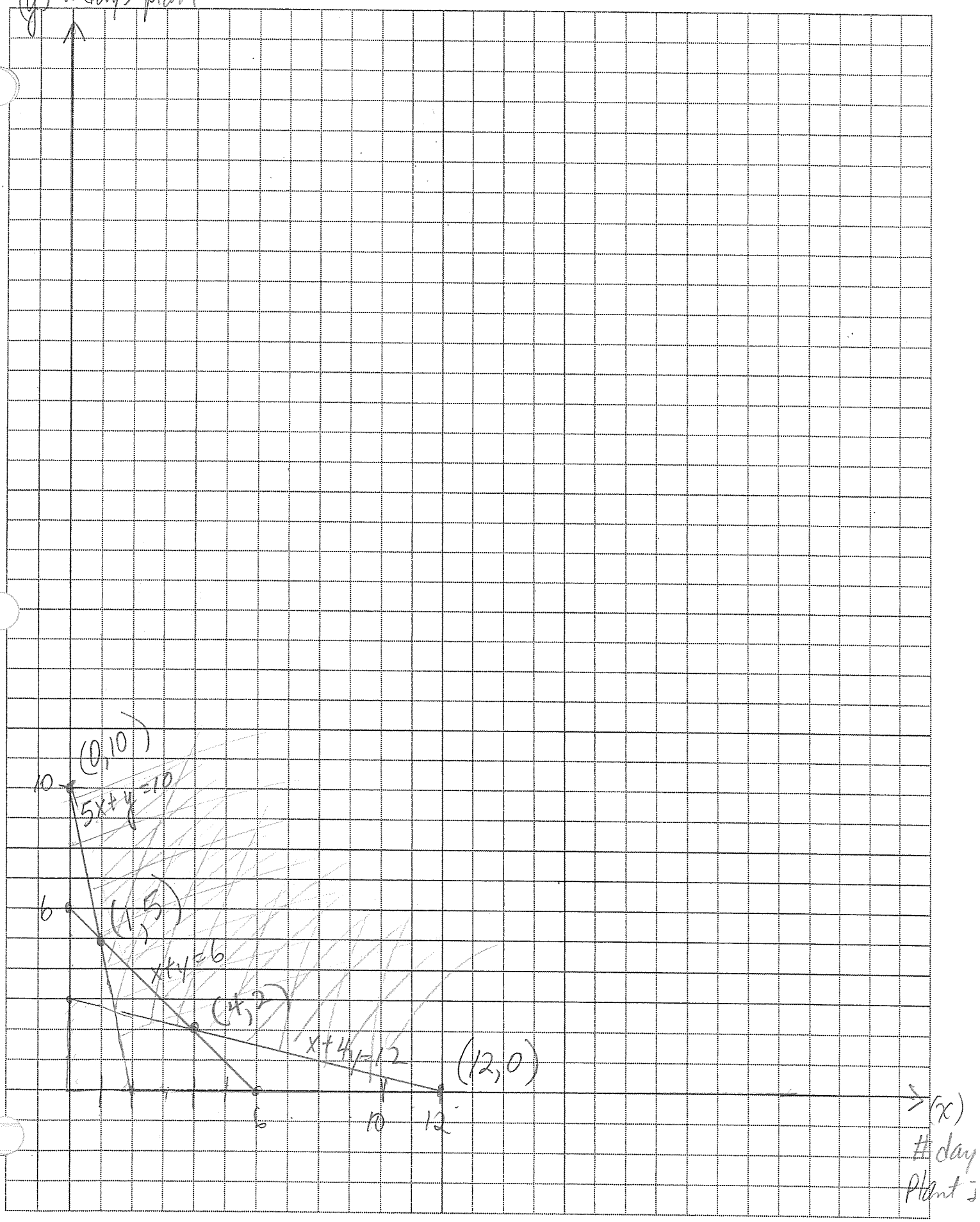
$x + y \geq 6$

$x + 4y \geq 12$

$10{,}000x + 20{,}000y = C$

Vertices	Cost
(0,10)	$200,000
(1,5)	$110,000
(4,2)	$80,000 ←
(12,0)	120,000

ARPCO should run Plant I 4 days and Plant II 2 days.
The cost will be $80,000.


(y) # days plant II
(0,10)
10
5x+y=10
6
(1,5)
x+y=6
(4,2)
x+4y=12
(12,0)
6
10
12
(x)
days
Plant I