

S's. 2 - 3 eliminations. Back-substitute.

$$\begin{aligned} 2x + by + cz &= d \\ ex + fy + gz &= h \\ ix + jy + kz &= l \end{aligned}$$

(1x) put on top
move that eq'n to
the top.

$$\begin{aligned} 2x + by + cz &= d \\ my + nz &= o \\ py + qz &= r \end{aligned}$$

Triangular

$$\begin{aligned} 2x + by + cz &= d \\ my + nz &= o \end{aligned}$$

$$sz = t$$

Solve for z

Put that in here

solve for y.

Put that in here

solve for x

Done.

Maximize $P = 7x + 4y$ $\$ 5.5$

Goal:

$$\begin{cases} 2x + 3y \leq 6 \\ 5x - 2y \leq 10 \\ x \geq 0 \\ y \geq 0 \end{cases}$$

Intercept:

x	y	
0	2	$3y = 6$
3	0	$2x = 6$

$0 \leq 6$? Yes, $(0,0)$ good.

x	y	
0	5	$-2y = 10$
2	0	$5x = 10$

$0 \leq 5$? Yes, $(0,0)$ good!

Guaranteed Test Question.

My 5.5 question(s) on the next test(s) will be a system just like this one. Book doesn't ask many like it. Old tests are maybe your best resource for these "Systems of Linear Inequalities" questions.