

Exercise 1

- a) The equations are equivalent to $y = 4x - 3$ and $y = \frac{-x+1}{2}$ respectively and can thus be trivially drawn. They intersect at $x = \frac{7}{9}$.
- b) As determined previously we have

$$\begin{aligned} 4x - 3 &= \frac{-x+1}{2} \\ 8x - 6 &= -x + 1 \\ 9x &= 7 \\ x &= \frac{7}{9} \end{aligned}$$

which is expected.

Exercise 2

a)

I	1	1	3	1		0	I	1	1	3	1		0
II	0	-1	-1	-1		1	II	0	-1	-1	-1		1
III	3	1	5	3		0	III - 3I	0	-2	-4	0		0
IV	1	5	11	8		0	IV - I	0	4	8	7		0

I	1	1	3	1		0	I	1	1	3	1		0
II	0	-1	-1	-1		1	II	0	-1	-1	-1		1
III - 2II	0	0	-2	2		-2	III	0	0	-2	2		-2
IV + 4II	0	0	4	3		4	IV + 2III	0	0	0	7		0

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