11.6

a) $\begin{cases} 10x + 8y = -13 & (G_1) \\ 15x + 12y = -18 & (G_2) \end{cases}$ x eliminieren

$3(G_1) - 2(G_2)$: $0x + 0y = -3$

$0 = -3$

falsche Aussage $\mathbb{L} = \{\}$

11.6 b)

$\begin{cases} -12x - 3y = 30 & (G_1) \\ -16x - 4y = 40 & (G_2) \end{cases} \Leftrightarrow \begin{cases} -4x - y = 10 & (G_1') \\ -4x - y = 10 & (G_2') \end{cases}$

$(G_1') - (G_2') \Rightarrow 0 = 0$

$x \in \mathbb{R}$ frei wählen, dann ist $y = -4x - 10$

11.6 c)

$\begin{cases} 2x + 5y - z = -8 & (G_1) \\ 15x - 10y - 20z = -26 & (G_2) \\ 9x - 6y - 12z = -15 & (G_3) \end{cases}$

x eliminieren:

$3(G_2) - 5(G_3)$: $0x + 0y + 0z = -3$

$0 = -3$

falsche Aussage, also keine Lösung $\mathbb{L} = \{\}$