

$$x_2 \leq 3$$

$$\max 2x_1 + x_2$$

$$7x_1 + x_2 \leq 28$$

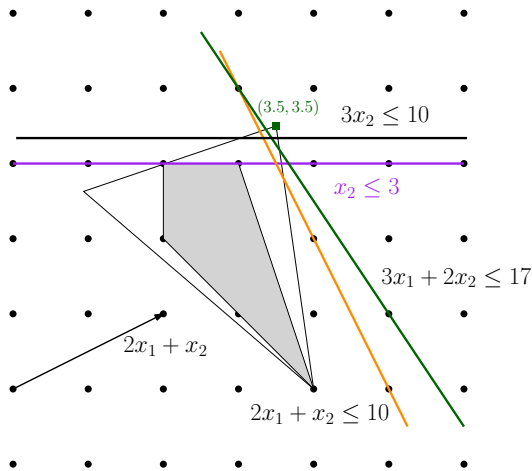
$$-x_1 + 3x_2 \leq 7$$

$$-8x_1 - 9x_2 \leq -32$$

$$x_i \in \mathbb{Z}$$

$$-3x_1 - 2x_2 \leq -9$$

$$2x_1 + x_2$$



$$\begin{aligned}
 x_1 &= \frac{7}{2} - \frac{3}{22}x_3 + \frac{1}{22}x_4 \\
 x_2 &= \frac{7}{2} - \frac{1}{22}x_3 - \frac{7}{22}x_4 \\
 x_5 &= \frac{55}{2} - \frac{3}{2}x_3 - \frac{5}{2}x_4 \\
 z &= \frac{21}{2} - \frac{7}{22}x_3 - \frac{5}{22}x_4
 \end{aligned}$$