Answer to Stephany Question: Application of Adding Constraints in Integer Programming. (Bazaraa, Jarvis, and Sherali 1990)
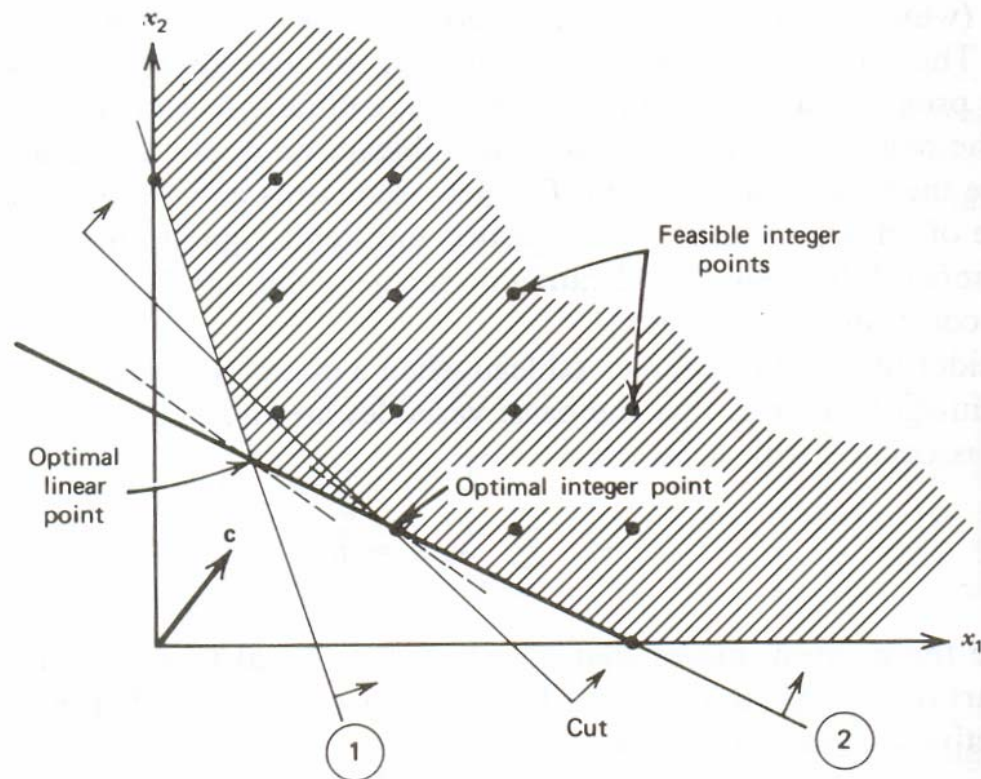

Figure 6.6. **The graphical solution.**

Example 6.15

Consider the following integer program.

$$\text{Minimize} \quad 3x_1 + 4x_2$$

$$\begin{aligned}
\text{Subject to} \quad & 3x_1 + x_2 \geq 4 \\
& x_1 + 2x_2 \geq 4 \\
& x_1, \quad x_2 \geq 0 \\
& x_1, \quad x_2 \quad \text{integer}
\end{aligned}$$