SOLVING LINEAR PROGRAMS USING EXCEL

Microsoft Excel

- Spreadsheet software.

- Product marketed by Microsoft.

- Widely used in the industry.

- Supports data analysis tools:
  - Includes a "Solver" that can be used to solve LPs.

Our Favorite Example

$$\begin{array}{rllcr}
\text{max.} & x_1 & +2x_2 & & \\
\text{s.t.} & -3x_1 & +x_2 & \leq & 2 \\
 & & +x_2 & \leq & 11 \\
 & x_1 & -x_2 & \leq & 3 \\
 & x_1 & & \leq & 6 \\
 & x_1, & x_2 & \geq & 0
\end{array}$$

Solution: $x_1 = 6$, $x_2 = 11$
Optimal Objective Value: 28

Solving in Excel