

# Optimization in Computer Networks

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November 4, 2017

## 1 PROBLEM 1

$$\begin{aligned} \max_x \quad & \sum_{i=1}^3 x_i \\ \text{s.t.} \quad & x_1 \leq 20 \\ & x_1 + x_2 \leq 30 \\ & x_2 \leq 20 \\ & x_2 + x_3 \leq 30 \\ & x_3 \leq 25 \end{aligned} \tag{1.1}$$

### 1.1 HEADING ON LEVEL 2 (SUBSECTION)

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$$A = \begin{bmatrix} A_{11} & A_{21} \\ A_{21} & A_{22} \end{bmatrix} \tag{1.2}$$

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#### 1.1.1 HEADING ON LEVEL 3 (SUBSUBSECTION)

HEADING ON LEVEL 4 (PARAGRAPH)