Transformation of LPs to Standard Form

Solution to Problem 3

$$
\begin{array}{lrcrcrcrcr}
\text{maximize} & -4z_1^+ & + & 4z_1^- & + & 2z_2 & - & z_3 & & \\
\text{subject to} & z_1^+ & - & z_1^- & - & 3z_2 & + & z_3 & \leq & 0 \\
 & & & & & 5z_2 & + & 3z_3 & \leq & 16 \\
 & & & & - & 5z_2 & - & 3z_3 & \leq & -16 \\
 & z_1^+ & - & z_1^- & + & z_2 & + & z_3 & \leq & 4 \\
 & & & & & & & z_3 & \leq & 4 \\
 & 0 & \leq & z_1^+, & z_1^-, & z_2, & z_3 & & &
\end{array}
$$