Solve the following simultaneous equations for $z_{1}, z_{2}$ and $z_{3}$ :

$$
\begin{aligned}
z_{1}-j 2 z_{2} & =2 e^{j \pi / 2} \\
4 z_{2}-j z_{3} & =4 e^{j \pi / 3} \\
2 z_{1}-z_{3} & =4 e^{j 7 \pi / 6}
\end{aligned}
$$

Use Matlab to do the numerical work, but explain how you set up the problem. Use help mldivide and help inv to find operators that solve simultaneous equations.

