

## PROBLEM:

Determine the inverse  $z$ -transforms of the following:

$$(a) H_a(z) = \frac{1 + 2z^{-2}}{1 - 0.25z^{-1}}.$$

$$(b) H_b(z) = \frac{3}{1 - 0.3z^{-1}} - \frac{2}{1 + 0.7z^{-1}}.$$

$$(c) H_c(z) = \frac{1 + 2z^{-1}}{1 - 0.4z^{-1} - 0.32z^{-2}}.$$