## PROBLEM:

Determine the *z*-transforms of the following. *Express your answer as the ratio of polynomials in $z^{-1}$.*

(a) $x_a[n] = 2(0.8)^n u[n]$.

(b) $x_b[n] = 4(\frac{1}{2})^n u[n] - 2(\frac{1}{4})^{n-1} u[n-1]$.

(c) $x_b[n] = \delta[n] + u[n-1]$.