Tutorial 1

Task 1

Working from the definitions of \boldsymbol{e} and \boldsymbol{v} in terms of V, V_v and V_s , show that $\boldsymbol{v} = 1 + \boldsymbol{e}$.

Task 2

Show that:

$$\rho = G_s \cdot \rho_w \cdot \left(\frac{1+w}{1+e}\right)$$

Task 3

Working from the definitions of e and n in terms of $V,\,V_{\nu}$ and $V_{s},\,$ show that:

(a)
$$e = \frac{n}{1-n}$$

(b)
$$n = \frac{e}{1+e}$$