2.8 What pressure, expressed in pascals, will a skin diver be subjected to at a depth of 40 m in seawater?

\[ p = \rho h + p_0 \]

At the surface \( p_0 = 0 \) so that

\[ p = (10.1 \times 10^3 \frac{N}{m^2})(40 \text{ m}) = 404 \times 10^3 \frac{N}{m^2} = 404 \text{ kPa} \]