**Exercise 2:** Attempt to replicate the following in black text. (**HINT:** You will need the `amsmath` package and you may need to use the command `\noindent` for formatting.)

The first equation is as follows:

$$\begin{aligned} y &= 2x^3 + 4x^2 + x + 2 \\ &= 2x^2(x+2) + (x+2) \\ &= (2x^2+1)(x+2) \end{aligned} \tag{1}$$

The second equation is as follows:

$$w_i = \frac{e^{(-0.5\Delta_i)}}{\left(\sum_{r=1}^{R} e^{(-0.5\Delta_i)}\right)} \tag{2}$$

The third equation is as follows:

$$\boldsymbol{\sigma} = \begin{bmatrix} \sigma_x & \tau_{xy} & \tau_{xz} \\ \tau_{yx} & \sigma_y & \tau_{yz} \\ \tau_{zx} & \tau_{zy} & \sigma_z \end{bmatrix} \tag{3}$$

Equation (3) is my favorite of the three. ← use an equation reference command here to get the parenthesis (ie `\eqref{}`)