```
b) y(x_{2n3}) = g(x_{2n3} = 1 + e^{-x_{2n2}} = (1 + e^{-x_{2n2}})^{-1}
          y'(x_{in3}) = -1 \cdot (1 + e^{x_{in3}})^2 \cdot (-e^{x_{in3}}) = \frac{e^{x_{in3}}}{(1 + e^{x_{in3}})^2} = \frac{e^{x_{in3}}}{(1 + e^{x_{in3}})^2} = e^{x_{in3}} \cdot (1 + e^{x_{in3}})^2
      y^{2}(x_{in3}) = e^{x_{in3}} (1 + e^{x_{in3}})^{2} - e^{x_{in3}} (1 + e^{x_{in3}})^{3} 2 \cdot e^{x_{in3}} = \frac{e^{x_{in3}}}{(1 + e^{x_{in3}})^{2}} - \frac{2e^{2x_{in3}}}{(1 + e^{x_{in3}})^{3}}
                             e^{x_{\text{EA3}}} + e^{x_{\text{EA3}}} - 2 e^{x_{\text{EA3}}} = \frac{e^{x_{\text{EA3}}} (1 - e^{x_{\text{EA3}}})^{3}}{(1 + e^{x_{\text{EA3}}})^{3}}
 y^{2}(x_{(n)}) = \frac{e^{x_{(n)}}}{(1+e^{x_{(n)}})^{2}} + \frac{2e^{2x_{(n)}}}{(1+e^{x_{(n)}})^{3}} - (4e^{2x_{(n)}})^{3} - 2e^{2x_{(n)}} \cdot 3(1+e^{x_{(n)}})^{3} - 2e^{2x_{(n)}}
  y'(x_{in3}) = (e^{x_{in3}} - 2e^{2x_{in3}})(1 + e^{x_{in3}})^{-3} + (e^{x_{in3}} - e^{2x_{in3}}) \cdot (-3)(1 + e^{x_{in3}})^{-4} \cdot (e^{x_{in3}})
                         \frac{e^{x(n)} - 2e^{2x(n)}}{(1 + e^{x(n)})^3} + \frac{3e^{x(n)} + 3e^{3x(n)}}{(1 + e^{x(n)})^4} = \frac{(e^{x(n)} - 2e^{2x(n)})(1 + e^{x(n)}) - 3e^{x(n)} + 3e^{x(n)}}{(1 + e^{x(n)})^4} = \frac{(e^{x(n)} - 2e^{2x(n)})(1 + e^{x(n)})}{(1 + e^{x(n)})^4} + \frac{3e^{x(n)}}{(1 + e^{x(n)})^4} = \frac{1}{(e^{x(n)} - 2e^{2x(n)})}
                        \frac{e^{x_{\text{End}}} - 2e^{2x_{\text{End}}} + 1e^{2x_{\text{End}}} - 2e^{2x_{\text{End}}} - 3e^{2x_{\text{End}}} + 3e^{3x_{\text{End}}}}{(1 + e^{x_{\text{End}}})^4} = \frac{e^{x_{\text{End}}} - (1 - 4e^{x_{\text{End}}} + e^{2x_{\text{End}}})}{(1 + e^{x_{\text{End}}})^4}
 C = 0; y(0) = \frac{1}{2}
                                                                                                  d<sub>o</sub> = 2
                                                                                                 \alpha_1 = \frac{A}{4} - \frac{A^2}{64}
                      y(0) = 4
                                                                                                 d2 = $ 0
                      y(0) = 0
                                                                                                 dz = 192
                       y_1^3(0) = -\frac{1}{8}
c = \ln 2 : y = \frac{2}{3}
y = \frac{2}{3}
y = \frac{2}{9}
y = -\frac{2}{27}
y = -\frac{2}{27}
       d_0 = \frac{2}{3} - \frac{2}{9} \ln 2 + \frac{1}{4} \left(-\frac{2}{27}\right) \cancel{A} + \frac{1}{2} \left(-\frac{2}{27}\right) \ln (2)^2 - \frac{1}{4} \left(-\frac{2}{27}\right) \cancel{A}^2 \ln 2 - \frac{1}{6} \left(-\frac{2}{27}\right) \ln (2)^2
     \alpha_1 = \frac{2}{9} A - (-\frac{2}{27}) A \ln 2 + 8 (-\frac{2}{27}) A^3 + \frac{1}{2} (-\frac{2}{27}) A \ln (2)^2
      \alpha_2 = \frac{1}{4} \left( -\frac{2}{27} \right) \, \cancel{A}^2 - \frac{1}{4} \left( -\frac{2}{27} \right) \, \cancel{A}^2 \, \cancel{L} \, \cancel{L}
      \alpha_0 = \frac{1}{24(-27)} A^3
```