

$$\left\{ \left\{ \Phi(x) \left(-\frac{50}{e^{1.66667(x-7)} + 1} + \frac{83.3333 e^{1.66667(x-7)}}{(e^{1.66667(x-7)} + 1)^2} - \varepsilon \right) - \Phi''(x) = 0, \right. \right.$$

$$\Phi(2.000000000000000000000000202111365 \times 10^{-11}) = 0, \Phi'(2.000000000000000000000000202111365 \times 10^{-11}) = 1000,$$

$$\left. \text{WhenEvent}[\Phi(x) = 0, \text{AppendTo}[\text{zeros}, x]] \right\},$$

$$, \left(\frac{83.3333 e^{1.66667(x-7)}}{(e^{1.66667(x-7)} + 1)^2} - \frac{50}{e^{1.66667(x-7)} + 1} \right) \Phi(x) - \Phi''(x) \Big\}$$