

$$\forall x \geq 0$$

we have:

(1)

$$[-0.06346 <] e^{-x} - \frac{60 - 24x + 3x^2}{60 + 36x + 9x^2 + x^3} \leq 0$$

(2)

$$[-0.04942 <] e^{-x} - \frac{2 + x^2}{2 + 2x + 4x^3} \leq 0$$

(3)

$$[-0.03987 <] e^{-x} - \frac{5 + x^2}{5 + 5x + x^2 + 5x^3} \leq 0$$

(4)

$$[-0.02951 <] e^{-x} - \frac{8 - x + x^2}{8 + 7x + 6x^3} \leq 0$$

(5)

$$[-0.01946 <] e^{-x} - \frac{17 - 5x + x^2}{17 + 12x + 5x^3} \leq 0$$

(6)

$$[-0.009566 <] e^{-x} - \frac{32 - 10x + x^2}{32 + 22x + 4x^2 + 3x^3} \leq 0$$