

3.86
r2

$$T_3 = \left(\frac{5}{2}\right) x^3 (x^{\log x})^2 = 10^6 = 10x^{3+2\log x} = 10^6 \quad x > 0$$

$$x^{3+2\log x} = 10^5 \quad / \log$$

$$(3+2\log x) \log x = 5$$

$$/ \log x = A$$

$$2A^2 + 3A - 5 = 0$$

$$A = -\frac{5}{2} \rightarrow \log x = -\frac{5}{2} \rightarrow x = \sqrt{10^{-5}}$$

$$A = 1 \rightarrow \log x = 1 \rightarrow x = 10$$

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