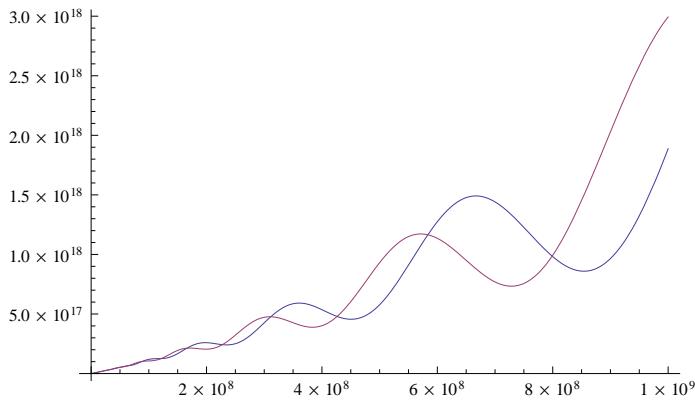


Example

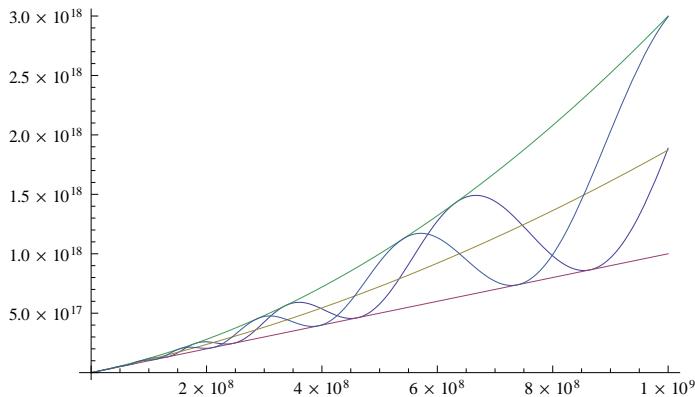
$$N\left[\text{Limit}\left[\frac{\text{Abs}[x^2 \times (\text{Sin}[10 \log[x]] + 1)] + 1000000000 x}{\text{Abs}[x^2 \times (\text{Cos}[10 \log[x]] + 1)] + 1000000000 x}, x \rightarrow \infty\right]\right]$$

$$\text{Limit}\left[\frac{1. \times 10^9 x + \text{Abs}[x^2 (1. + \text{Sin}[10 \log[x]] + 1)]}{1. \times 10^9 x + \text{Abs}[x^2 (1. + \text{Cos}[10 \log[x]] + 1)]}, x \rightarrow \infty\right]$$

$$\text{Plot}\left[\left\{\text{Abs}[x^2 \times (\text{Sin}[10 \log[x]] + 1)] + 1000000000 x, \text{Abs}[x^2 \times (\text{Cos}[10 \log[x]] + 1)] + 1000000000 x\right\}, \{x, 1, 1000000000\}\right]$$



$$\text{Plot}\left[\text{Tooltip}\left\{\text{Abs}[x^2 \times (\text{Sin}[10 \log[x]] + 1)] + 1000000000 x, 1000000000 x, 2 x^{1.96} + 1000000000 x, 2 x^2 + 1000000000 x, \text{Abs}[x^2 \times (\text{Cos}[10 \log[x]] + 1)] + 1000000000 x\right\}, \{x, 1, 1000000000\}\right]$$



$$\text{Limit}\left[\left(\text{Abs}[x^2 \times (\text{Sin}[10 \log[x]] + 1)] + 1000000000 x\right) / (1000000000 x), \{x \rightarrow \infty\}\right]$$

{Interval[{0, \infty}]}

Should be : {Interval[{1, \infty}]}

$$\text{Limit}\left[\left(\text{Abs}[x^2 \times (\text{Sin}[10 \log[x]] + 1)] + 1000000000 x\right) / (2 x^2 + 1000000000 x), \{x \rightarrow \infty\}\right]$$

{Interval[{0, 1}]}