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$$\lim_{x \rightarrow -\infty} x \log 4 + \sqrt{x^2 - 2x + 6} \log_{10} e$$

$$= \lim_{x \rightarrow -\infty} 2x \log 2 + \sqrt{x^2 - 2x + 6} \log (1 + \cos \frac{1}{3x})$$

$$= \lim_{x \rightarrow -\infty} 2x \log 2 + \sqrt{x^2 - 2x + 6} \log \left(1 + \cos \frac{1}{3x} \right) \frac{1}{\frac{1}{2} \log e}$$

$$= \lim_{x \rightarrow -\infty} 2 \left[x \log 2 + \sqrt{x^2 - 2x + 6} \log \left(1 + \cos \frac{1}{3x} \right) \right] =$$

$$= 2 \lim_{x \rightarrow -\infty} \left[x \log 2 + \sqrt{x^2 - 2x + 6} \log 2 - \right]$$

$$\left(1 + \cos \frac{1}{3x} \right) =$$

$$\frac{1}{\log_{10} e}$$

$$\frac{1}{\frac{1}{2} \log e}$$

$$\sqrt{x^2 - 2x + 6} \log 2 + \sqrt{x^2 - 2x + 6} \log \left(1 + \cos \frac{1}{3x} \right) =$$

$$= 2 \lim_{x \rightarrow -\infty} \log_2 \left(x + \sqrt{x^2 - 2x + 6} \right) + 2 \lim_{x \rightarrow -\infty}$$

$$= 2 \log_2 \lim_{x \rightarrow -\infty} \frac{\left(\sqrt{x^2 - 2x + 6} + x \right) \left(\sqrt{x^2 - 2x + 6} - x \right)}{\sqrt{x^2 - 2x + 6} - x}$$

$$= 2 \log_2 \lim_{x \rightarrow -\infty} \frac{x^2 - 2x + 6 - x^2}{\sqrt{x^2 - 2x + 6} - x} + 2 \lim_{x \rightarrow -\infty}$$

$$= 2 \log_2 \lim_{x \rightarrow -\infty} \frac{-2x + 6}{\sqrt{x^2 - 2x + 6} - x} + 2 \lim_{x \rightarrow -\infty}$$

$$= 2 \log_2 \frac{-2}{-2} + 2 \lim_{x \rightarrow -\infty} \sqrt{x^2 - 2x + 6} \left(-\frac{1}{x} + \right)$$

$$\sqrt{x^2 - 2x + 6} \left[\log_2 \left(1 + \cos \frac{1}{3x} \right) - \log 2 \right] =$$

$$+ 2 \lim_{x \rightarrow -\infty} \sqrt{x^2 - 2x + 6} \log \frac{1 + \cos \frac{1}{3x}}{2} =$$

$$\sqrt{x^2 - 2x + 6} \log \left[\frac{1 + \cos \frac{1}{3x} + 1}{2} + 1 - 1 \right]$$

$$\sqrt{x^2 - 2x + 6} \log \left[\frac{\left(1 + \cos \frac{1}{3x} \right) + 1}{2} + 1 \right] + 1 \left[\right]$$

$$\frac{1 + \cos \frac{1}{3x}}{2} \rightarrow 1$$

$$= 2 \log 2 + \lim_{x \rightarrow -\infty} \sqrt{x^2 - 2x + 6}$$

$$\lim_{x \rightarrow -\infty} \left(\frac{1}{2} + \frac{1 - \cos \frac{1}{9x^2}}{2} \right) \cdot 9x^2$$

$$= 2 \log 2 + 2 \lim_{x \rightarrow -\infty} \sqrt{x^2 - 2x + 6}$$

$$= 2 \log 2 + 2 \lim_{x \rightarrow -\infty} \sqrt{x^2 - 2x + 6}$$

$$= 2 \log 2 + 2 \lim_{x \rightarrow -\infty} \sqrt{x^2 - 2x + 6}$$

1- rec. audio, high-end hi-fi.

2- alt. jan. heinlein out. di. feute. R. A. Heimlein

3- comp. os. linux. hardware linux

$$\frac{1 + \cos \frac{1}{3x} - 2}{2} =$$

$$\frac{1 + \cos \frac{1}{3x} - 1}{2} =$$

$$\left(\frac{1 - \cos \frac{1}{3x}}{3x} \right) \approx$$

H I JK L M N O

$$2 \log 2 - \lim_{x \rightarrow -\infty} \frac{\sqrt{x^2 - 2x + 6}}{9x^2} = \frac{1 - \cos \frac{1}{3x}}{\frac{1}{9x^2}}$$

$$= 2 \log 2 - \lim_{x \rightarrow \infty} \frac{1}{9x^2} = 2 \log 2$$

$$= 2 \log 2 - \lim_{x \rightarrow \infty} \frac{1 - \cos \frac{1}{3x}}{\frac{1}{9x^2}}$$

$$= 2 \log 2 - 0 = 2 \log 2$$

1 us. music. info ~~purkpa rock~~

$$\frac{1}{9x^2} =$$

$$\sqrt{\frac{x^2 - 2x + 6}{81x^4}} =$$

$$\frac{1}{9x^2} =$$