

b) $\frac{d}{dx} a^x$

c) $\frac{d}{dx} e^x$

d) $\frac{d}{dx} \ln x$

e) Derivatives of the 6 inverse trig functions

f) $\lim_{x \rightarrow +\infty} e^x = \underline{\hspace{2cm}}$ $\lim_{x \rightarrow -\infty} e^x = \underline{\hspace{2cm}}$ $\lim_{x \rightarrow +\infty} \ln x = \underline{\hspace{2cm}}$ $\lim_{x \rightarrow 0^+} \ln x = \underline{\hspace{2cm}}$