

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

10. Steps for identifying asymptotes

Vertical

Horizontal

11. Steps for proving continuity at a point

12. Sketch a graph of a function that meets the following conditions. (There are many possibilities.)

a) $f(-2) = 6$

b) $f(7) = -3$

c) $\lim_{x \rightarrow -2} f(x) = 1$

d) $\lim_{x \rightarrow 7} f(x)$ does not exist

e) $\lim_{x \rightarrow -\infty} f(x) = \infty$

f) $\lim_{x \rightarrow \infty} f(x) = 8$

g) It passes the vertical line test.