

Always do the terminology fill-in-the-blank questions at the beginning of each homework section. This section, they are the first 8 questions. This is the last time I'm telling you. Henceforth, this is just something you do.

Solve the equation for the '?.'

9. $2^? = 64$

10. $3^? = \frac{1}{81}$

Evaluate the following:

11. $\log(10)$

12. $\ln(0)$

13. $\ln(e)$

Sketch the graph of each of the following:

14. $y = \log_3(x)$

17. $h(x) = \log_{1/5}(x)$

15. $f(x) = \log_5(x)$

18. $f(x) = \ln(x-1)$

16. $y = \log_{1/2}(x)$

19. $f(x) = \log(x+2) - 3$

Use a graph or a table to find each of the following limits:

20. $\lim_{x \rightarrow \infty} (\log_3(x))$

21. $\lim_{x \rightarrow \infty} (\log(x))$