$\qquad$ Date $\qquad$ Period $\qquad$
Integrated Math 3A Homework Due Friday

- 5-57. Using the idea behind the Ancient Puzzle you studied today, what is the value of $b$ in each equation below? Explain your reasoning. Homework Help *.
a. $\log _{b} 243=5$
b. $\quad \log _{b} 0.001=-3$
- 5-59. Sketch the graph of $y+3=2^{x}$. Homework Help *
a. What are the domain and range of this function?
b. Does this function have a line of symmetry? If so, what is it?
c. What are the $x$ - and $y$-intercepts?
d. Sketch the inverse of this function on the same set of axes. What are the domain, range, and $x$ and $y$-intercepts of the inverse?


