

**2)** (5 pts) ANL (Algorithm Analysis)

An algorithm to find a particular value among  $n$  total values takes  $O(\log(n))$ . On a data set with  $n = 2^{30}$ , it took 1.2 seconds to find the desired value. How many **milliseconds** will it take to find a value in a data set with  $n = 2^{20}$ ? (Note: For ease of computation, you may use a logarithm with base 2.)