

7. [5 points]

- a. [3 points] Let k, j be positive constants with $k > j > 0$. If any of the following values are undefined, write them in the “Undefined:” blank below. Then sort the remaining values from least to greatest.

$$0 \qquad \log(-k) \qquad \log(k/j) \qquad \log(j/k) \qquad \log(0)$$

Undefined: 0, $\log(-k)$

Remaining quantities ordered from LEAST to GREATEST:

$$\underline{\log(j/k) < 0 < \log(k/j)}$$

- b. [2 points] If $\log(ab) = 2$, then...

Give a value for each of the following, or write NEI if there is not enough information to answer.

$$ab = \underline{10^2 = 100}$$

$$\log(a) \cdot \log(b) = \underline{\text{NEI}}$$