

Student Name: \_\_\_\_\_

Score: \_\_\_\_\_

**Rewrite as Single Logarithm Using Product and Quotient Rule**

Problems

Work Space

|   |  |
|---|--|
| $\log_a x + \log_a y - \log_a z$<br><br>Answer:                               |  |
| $\log_s l^4 m^2 + \log_s n - \log_s lmn$<br><br>Answer:                       |  |
| $\log_h \frac{x}{y} + \log_h \frac{y}{z} - \log_h \frac{z}{y}$<br><br>Answer: |  |
| $\log_a ab + \log_a bc - \log_a ca$<br><br>Answer:                            |  |
| $\log_s (m + n) + \log_s (l + m) - \log_s m$<br><br>Answer:                   |  |