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

9.3 Laws of Logs/Change of Base

Use laws of logs to expand the expression

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

Use the laws of logarithms to condense the expression.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

Use the change of base formula and a calculator to evaluate the logarithm, correct to six decimal places.

1.  22.  23.  24. 