Using the Laws of Logarithms

1. Rewrite the following as a single common logarithm.

a.  b.  c.  d. 

2. Rewrite the following as a single common logarithm.

a.  b.  c.  d. 

3. Simplify without using a calculator.

a.  b.  c. 

4. Show that:

a.  b.  c.  d. 

5. Rewrite the following as logarithmic equations.

a.  b.  c.  d. 

6. Rewrite the following without logarithms

a.  b.  c. 

7. Solve for *x.*

a.  b.  c. 