Math S-Xab Summer 2004
Worksheet: Properties of Logarithms
July 21, 2004

1. Express $\log_2(u^2 w)$ in terms of $A = \log_2 u$ and $B = \log_2 w$.

2. Express $\log_b(u^3/w^2)$ in terms of $A = \log_b u$ and $B = \log_b w$.

3. Express $\log_7(1/\sqrt{w})$ in terms of $A = \log_7 w$.

4. Express $\log_2 2/\sqrt{uw}$ in terms of $A = \log_2 u$ and $B = \log_2 w$.

5. Simplify $3^2 10^{2 \log 5}$

6. Simplify $5e^{-3 \ln 2}$

7. Simplify $2^{3+\log_2 2}$

8. Simplify $e^{(\ln 3)/2}$