

Math S-Xab  
Worksheet—Solving Logarithmic and  
Exponential Equations

Summer 2004

1. Solve  $e^{3x} = (5/e)^{x+1}$  for  $x$ .

2. Solve  $3^x \cdot \frac{5}{3^{x+1}} = 0$  for  $x$ .

3. Solve  $\log x - \log(x + 1) = 2$  for  $x$ .

4. Solve  $\ln \sqrt{x} + \ln x^2 = 1 - 2 \ln x$  for  $x$ .

5. Solve  $e^x(e^x - 5) = 6$  for  $x$ .

6. Solve  $2e^{2x} + 6 = 11e^x$  for  $x$ .