

6.6 Practice Problems

Solve each exponential equation.

1. $4^{2x+4}=64$

2. $3^x=19$

3. $4^{x+5}=5^{2x-3}$

4. $30e^{2x}-5=355$

5. $3^{2x}-8\cdot 3^x+15=0$

Solve each logarithmic equation in problems 6 - 10. Be sure to reject any value of x that is not in the domain of the original logarithmic expression.

6. $\log_3(x+5)=4$

7. $2\log_7x=\log_764$

8. $\log_6x+\log_6(x+5)=2$

9. $\log(x-9)=\log(x+4)+\log 3$

10. $\log_3(x-2)+1=\log_3(3x+1)$