Name \_\_\_\_\_

Date \_\_\_\_\_

## Solving Exponential Equations - Independent Practice Worksheet

Complete all the problems.

1. Solve the exponential equation:  $6^{x-3} = 216^{x-3}$ 

2. Solve the exponential equation:  $7^{x-4} = 2401^{x-4}$ 

3. Solve the exponential equation:  $8^{x-3} = 512^{x-3}$ 

4. Solve the exponential equation:  $9^{x-5} = 59049^{x-5}$ 

5. Solve the exponential equation:  $10^{x-2} = 100^{x-2}$ 

6. Solve the exponential equation:  $3^{4x+3} = 1/243$ 

7. Solve the exponential equation:  $4^{4x+8} = 1/256$ 

8. Solve the exponential equation:  $5^{2x+4} = 1/625$ 

9. Solve the exponential equation:  $6^{5x+2} = 1/216$ 

10. Solve the exponential equation:  $8^{6x+6} = 1/512$