

## Solving Exponential Expressions

1. Solve. Check your solutions by substituting into the left and right sides of the equation and evaluating.

a.  $3^{3x+1} = 9^{x-2}$

b.  $25^{2y-1} = 5^{3y+1}$

c.  $4^{2(p-1)} = 64^{3p+4}$

d.  $1000^{2m-5} = 10^{3(m+3)}$

e.  $4^{x-3} = 8^{x+1}$

f.  $27^{w-3} = 9^{2(w+4)}$