

Solving Exponential Equations with Like Bases (2.2)

Solving Exponential Equations: Solve each exponential equation by expressing each side as a power of the same base and then equating exponents.

1) $49^{x+1} = 7^{3x-4}$

2) $\left(\frac{1}{3}\right)^{5x-2} = 9^{x+2}$

3) $2^{3x-1} + 5 = 13$

4) $9^{2x-1} = \frac{1}{27}$