

I. Solve each equation using logarithms. Round solutions to the nearest hundredth.

1. $5^{x-1} = 2^x$

2. $3^{2x} = 7^{x-1}$

3. $6^{x-2} = 4^x$

4. $12^{x-4} = 3^{x-2}$

5. $\sqrt[3]{4^{x-1}} = 6^{x-2}$

II. Solve each exponential.

1. $e^{2x} + 6e^x - 16 = 0$

2. $e^{2x} - 7e^x - 8 = 0$

3. $3^{2x} - 8 \cdot 3^x - 20 = 0$

4. $3^{2x} - 7 \cdot 3^x - 18 = 0$