

6.4.D3 – Solving Exponential Equations

Solve the exponential equation using logarithms. Provide an EXACT answer, solve for x , and an approximate answer, rounded to 3 decimal places.

1. $7^x = 300$

2. $5^{x-4} = 135$

3. $13^{5x} - 4 = 39$

4. $4.6(19)^{x-5} = 23$

5. $20e^{4x+1} = 58$

6. $200(2)^{0.5x} + 1 = 355$

7. $40e^{-0.2x} - 5 = 7$