Solving Exponential Equations with Coefficients

Directions: Isolate the exponential expression first, then solve. Show all work. No calculators.

1. Solve $2 \cdot 3^x = 486$.

2. Solve $3 \cdot 2^x = 96$.

3. Solve $4 \cdot 3^x = 324$.

4. Solve $5 \cdot 2^x = 160$.

5. Solve $6 \cdot 5^x = 750$.

6. Solve $7 \cdot 2^{x+1} = 224$.

7. Solve $4 \cdot 3^{x-1} = 108$.

8. Solve $5 \cdot 2^{2x} = 320$.

9. Solve $2 \cdot 5^{x-2} = 50$.

10. Solve $3 \cdot 4^{x+1} = 192$.