Section D Comprehensive Review

Directions: Solve each exponential equation. Show all work. No calculators.

1. Solve $2^x = 128$.

2. Solve $3^x = 243$.

3. Solve $4^x = \frac{1}{64}$.

4. Solve $3^x = \frac{1}{81}$.

5. Solve $5^{2x-9} = 125$.

6. Solve $2^{3x-4} = 32$.

7. Solve $3^{2x+1} = 81$.

8. Solve $5^{2x+2} = 625$.

9. Solve $2 \cdot 3^{x} = 486$.

10. Solve $3 \cdot 2^{x} = 384$.

11. Solve $8^{5x-3} = 8^{x+5}$.

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

13. Solve $3^x = 243$.

14. Solve $4^x = 1024$.

15. Solve $5^x = \frac{1}{125}$.

16. Solve $2^x = \frac{1}{32}$.

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

18. Solve $5 \cdot 3^x = 405$.

19. Solve $2^{x+2} = 64$.

20. Solve $3^{x+1} = 243$.

21. Solve $4 \cdot 3^{x} = 324$.

22. Solve $2 \cdot 5^{x} = 250$.

23. Solve $3^{4x+1} = 3^{x+7}$.

24. Solve $2^{5x-4} = 2^{x+8}$.

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

26. Solve $6 \cdot 3^x = 486$.

27. Solve $2^{2x-1} = 32$.

28. Solve $3^{2x-1} = 243$.