Use the common base method to solve each of the equations. Show your work neatly organized.

1. $3^x = 27$

2. $5^x = .2$

3. $2^x = .25$

4. $32^x = 4$

5. $81^x = 27$

6. $25^x = 125$

7. $2^{(3x-5)} = 8$

8. $5^{(2x+3)} = 625$

9. $10^{(4x-1)} = .001$

10. $8^{(2x-1)} = 16^{(x+2)}$

Use logarithms to solve each of the equations. Express your answers rounded to the nearest hundredth. Show your work neatly organized.

11. $3^x = 5$

12. $2^x = .2$

13. $6^{2x} = 3$

14. $3^{-2x} = 35$

15. $5^{(x+2)} = 50$

16. $2^{(2x-1)} = 20$

17. $3^{(x+1)} = 5^{(2x-3)}$

18. $e^{3x} = 5$

19. $e^{(2x+1)} = 9$

20. $e^{(x-2)} = 2$