

Name _____ # _____
Date _____ Pd. _____

Lesson 8-2-3 Learning Log

On a separate piece of paper, explain each law of exponents that you have learned in this chapter. For each law, please provide an example.

Laws of exponents:

- Multiplying numbers with exponents
- A power raised to a power
- Dividing numbers with exponents
 - You may use expanded form to explain how to simplify.
- Negative exponents

Additional Practice

Simplify. Write in decimal form.

1. 10^{-3}

2. 10^3

3. 10^{-5}

4. 10^{-2}

5. 10^0

6. 10^4

7. 10^1

8. 10^5

Simplify.

9. 6^{-2}

10. 9^{-3}

11. 2^{-5}

12. 3^{-4}

13. 12^{-1}

14. 6^{-3}

15. $10 - (3 + 2)^0 + 2^{-1}$

16. $15 + 6^0 + 3^{-2}$

17. $6(8 - 2)^0 + 4^{-2}$

18. $2^{-2} + 4^{-1}$

19. $3(1 + 2)^{-2} + 9^{-1} + 12^0$

20. $9^0 + 64(3 + 5)^{-2}$

21. One milliliter equals 10^{-3} liter. Simplify 10^{-3} .

22. The volume of a cube is 10^6 cubic feet. Simplify 10^6 .
