

Name: _____

Class Period: _____

Ch 8 Test Review #2

1. $b^{-4}c^0d^6$

2. $\frac{x^{-2}}{y^{-8}}$

3. $7k^{-8}h^3$

4. $\frac{1}{p^2q^{-4}r^0}$

5. $\left(\frac{2}{5}\right)^{-4}$

6. $(-2)^{-3}$

7. -2^{-3}

8. $7^{-2}y^{-4}$

9. $\frac{9w^{-4}}{x^{-2}y^7}$

10. **Critical Thinking** Is $(-3b)^4 = -12b^4$? Explain why or why not.

11. $2d^2d^3$

12. $(q^3r)^4$

13. $(5c^{-4})(-4m^2c^8)$

14. $(1.34^2)^5(1.34)^{-8}$

15. $(12x^2y^{-2})^5(4xy^{-3})^{-8}$

16. $(-2r^{-4})^2(-3r^2z^8)^{-1}$

17. $\frac{w^2}{w^5}$

18. $(8^3) \cdot 8^{-5}$

19. $\left(\frac{21x^3}{3x}\right)$

20. $\left(\frac{n^5}{v^3}\right)^7$

21. $\frac{e^{-6}c^3}{e^5}$

Write a function for the following problems and then solve.

22. You purchase a new car for \$25,450, what will the value of the car be worth in 5 years if it depreciates 3.5%?

23. The cost for IL State University in 2000 was \$4,209. It has an annual increase in tuition of 3%. How much will it cost if you attend the fall after you graduate?

24. Your parents put \$10,000 in a CD for 18 years with a 2.5% interest rate compounded quarterly. If your parents want you to put this towards college, how much money will you have?

Fill in the table and graph.

