

Name: _____

Date: _____

Zero and Negative Exponents Algebra 1 Homework

Skills

For problems 1 through 36, rewrite without zero or negative exponents.

1. $4^{-3} =$

2. $-5^{-2} =$

3. $5^0 =$

4. $10^{-2} =$

5. $-4^{-3} =$

6. $2^{-4} =$

7. $\frac{1}{2^{-2}} =$

8. $\frac{1}{4^0} =$

9. $(-3)^{-2} =$

10. $3x^0 =$

11. $5x^{-4} =$

12. $\frac{x^5}{y^{-3}} =$

13. $\frac{a^{-4}}{b^{-3}} =$

14. $-2x^0y^{-2} =$

15. $2^{-3} =$

16. $(16x^2y^{-5})^0 =$

17. $-3^0 =$

18. $8x^0y^{-3} =$

19. $(-3)^{-3} =$

20. $\left(\frac{1}{2}\right)^{-1} =$

21. $\left(\frac{1}{2}\right)^{-2} =$

22. $\left(\frac{1}{3}\right)^{-1} =$

23. $1^{-6} =$

24. $(-5)^0 =$

25. $(-1)^{-2} =$

26. $-2^{-1} =$

27. $(-2)^{-1} =$

28. $(-2)^{-2} =$

29. $(-2^{-2})^{-1} =$

30. $\frac{2x^{-3}y^2}{4x^{-4}y^{-1}} =$

31. $a^3b^{-4} =$

32. $\frac{a^{-2}}{b^4} =$

33. $\frac{x^2}{2y^{-3}} =$

34. $\frac{-3x^3}{y^{-4}} =$

35. $\frac{x^0y^{-3}}{z^2} =$

36. $2x^{-1}y^{-4} =$

Use the STORE feature on your calculator to help evaluate the following.

37. y^{-3} for $y = 2$

38. y^{-3} for $y = \frac{1}{2}$

39. $2x^{-4}y^{-1}$ for $x = 2, y = \frac{1}{3}$

40. $(x+3)^{-2}$ for $x = -4$

41. x^{-y} for $x = -2, y = 2$

42. $(x^4y^2)^0$ for $x = \frac{4}{3}, y = -\frac{2}{7}$

43. x^yx^{-y} for $x = \frac{2}{5}, y = -\frac{4}{3}$