

Algebra RH

Essential Question: How do we evaluate zero and negative exponents?

Do Now: Evaluate.

2^4

2^3

2^2

2^1

2^0

2^{-1}

2^{-2}

2^{-3}

Important Concepts

Simplifying Exponential Expressions.

Express answers with positive exponents and evaluate numerical expressions.

1. 3^{-2}

4. $\left(\frac{2}{3}\right)^{-2}$

2. 2^{-4}

5. $(5a)^{-1}$

3. a^{-3}

6. $(-11)^2y^0$

7. $x^{-10}y^{21}$

8. $20x^{-8}y^{-8}$

9. $\frac{1}{3^{-2}}$

10. $\frac{1}{x^{-4}}$

11. $\frac{6}{18x^{-3}}$

12. $\frac{8^{-2}}{2^{-4}x^{-4}}$

13. $\frac{x^{-4}}{(12y)^{-2}}$

14. $\left(\frac{2x}{y^{-1}}\right)^2$

15. $\left(\frac{2x}{y^{-1}}\right)^{-2}$