

7-1

Reteaching (continued)

Zero and Negative Exponents

Exercises

Write each expression as an integer, a simple fraction, or an expression that contains only positive exponents. Simplify.

1. $2 \cdot 3^0$ **1**

2. 10^{-4} $\frac{1}{10,000}$

3. $2a^{-5}$ $\frac{2}{a^5}$

4. 113.7^0 **1**

5. 19^{-1} $\frac{1}{19}$

6. $\frac{3^{-3}}{p}$ $\frac{1}{27p}$

7. $(7q)^{-1}$ $\frac{1}{7q}$

8. $\left(-\frac{7}{8}\right)^{-2}$ $\frac{64}{49}$

9. $1.8c^0$ **1.8**

10. $(-9.7)^0$ **1**

Write each expression so that it contains only positive exponents. Simplify.

11. -6^{-3} $-\frac{1}{216}$

12. $-2rs^{-5}$ $-\frac{2r}{s^5}$

13. $7x^{-8}y^0$ $\frac{7}{x^8}$

14. $\left(\frac{5a}{3b}\right)^{-2}$ $\frac{9b^2}{25a^2}$

15. $(-8v)^{-2}w^3$ $\frac{w^3}{64v^2}$

16. $\frac{2^{-3}}{m^0n^{-1}}$ $\frac{n}{8}$

17. $(3xy)^0z$ **z**

18. $\frac{-3^{-3}}{uv^{-2}}$ $-\frac{v^2}{27u}$