

Worksheet

Name: _____

Date: _____

Read each problem carefully and show all of your work.

Simplify each expression:

1. $(ab)^6$	2. b^7b^{-3}
3. $(m^2)^5$	4. $\left(\frac{4x}{y}\right)^{-1}$
5. $(25^3xy)^0$	6. $(-3m^2)^4$
7. $a^2b^{-4}a^3a^{-3}b^5$	8. $\frac{5}{a^4} \cdot \left(\frac{a^{-5}}{b^3}\right)^{-2}$
9. $(4xy^3)^6(4x^{-3}y^{-2})^{-4}$	10. $\frac{(2mn)^3}{-3m^2n^{-2}m^5}$

Convert the scientific notation to standard form:

11. 1.23×10^{-4}

12. 3.04×10^5

Convert from standard form to scientific notation:

13. 76,056,000,000

14. 0.00000123