

Topic 5.1
Monomials
Homework

Name: _____

Date: _____

Simplify. Assume no variable equals 0.

1. $x^4 \cdot x^7$

2. $(3x^2)^3$

3. $(4xy^2)(2x^4y)$

4. $\frac{x^8}{x^3}$

5. $(3x^{-2})(4y^3)(x^5y^2)$

6. $\frac{x^2y^{-3}}{x^5y^2}$

7. $\frac{12z}{3x^{-3}y^2}$

8. $\frac{14x^{-1}y^{-3}}{21x^{-5}}$

9. $\frac{4xyz^2}{20x^5y^{-2}}$

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

11. $\left(\frac{2x^3}{3y^{-4}}\right)\left(\frac{6x^{-1}}{5y^7}\right)$

12. $\frac{(3xy)^{-2}}{z^{-4}}$

13. $\frac{(4x)(5y^{-4})}{(3xy^2)(2x^9)}$