

**Business PreCalculus**    MATH 1643 Section 010, Spring 2013  
**Worksheet 1**

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1- Apply the rules to simplify:

a.  $(8x^2)^{-1}$

b.  $6(a^{-1}b)^3$

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

2- Simplify:

a.  $\frac{5a^{-2}bc^2}{a^4b^{-3}c^2}$

b.  $\left(\frac{xy^{-3}z^{-2}}{x^2y^{-4}z^3}\right)^{-3}$

c.  $\frac{(-3)^2a^5(bc)^2}{(-2)^3a^2b^3c^4}$

3. Write each number in scientific notation:

a. 20,500

b. 0.0019