**2.6: Powers of Monomials**

**To determine powers of monomials:**

METHOD 1:

1. Rewrite the power in expanded form (change to repeated multiplication).
2. Multiply the monomials using the rules listed above.

Ex.) Simplify.

1.  b)  c) 

 d)  e)  f) 

g) 

METHOD 2:

1) Raise the numerical coefficient to the appropriate exponent, and then evaluate.

2) Apply the power of a power rule to the variables (multiply the exponents together). Repeat for each different variable in the question.

Ex.) Simplify.

1.  b)  c) 

d)  e) 

Challenge Questions:

Simplify.

a) $\left(3x^{4}y^{2}\right)\left(-3xy^{2}\right)^{2}$ b) $\frac{\left(2m^{2}n\right)^{3}}{\left(3mn\right)^{2}}$

c) 