

Group Quiz 6 Chapter 3

Please Show all of your steps clearly for credit.  
Also, get in the habit of checking on the calculator.

1. Simplify:  $(-3x^2y^3)^2(-2x^5y^2)^3$

2. Simplify:  $\left(\frac{7b^4c^{-5}}{14b^7c^{-2}}\right)^4$

3. Simplify:  $\frac{(16b^{-2}c)(25b^4c^{-5})}{(15b^5c^{-1})(8b^{-7}c^{-2})}$

4. Simplify each expression. Assume  $b$  and  $c$  are positive.

(a)  $4(25b^8c^{14})^{-1/2}$

(b)  $b^{2/7}b^{-16/7}$

(c)  $\left(\frac{9b^3c^{-2}}{25b^{-5}c^2}\right)^{1/2}$