Notes 9-2

Multiplying and Factoring

** When you multiply, any terms with the same base may be multiplied to make a new product. They DO NOT have to be like terms.**

Ex. 1: Simplify the product $-7h(3h^2 - 8h - 1) =$

$-21h^3 + 56h^2 + 7h$

Hint: First scan the coefficients and find their GCF, then scan for the least power of the variable.

Ex. 2: Find the GCF of the terms of the polynomial $4b^3 - 2b^2 - 6b$

$2b$

Ex. 3: Use the GCF to factor $6m^3 - 12m^2 - 24m$

GCF: $6m$

$$\frac{6m^3}{6m} - \frac{12m^2}{6m} - \frac{24m}{6m}$$

* divide each term by the GCF

$6m(m^2 - 2m - 4)$