

# Algebra I

5-3

## Monomial Factors of Polynomials

Divide. (pg 196)

1)  $\frac{6a+9}{3}$   
must reduce all by the same amount

$2a+3$

13)  $\frac{8r^4 - 4r^3 - 6r^2}{-2r}$

$+ -2r$   
 $-4r^3 + 2r^2 + 3r$

17)  $\frac{x^2y - xy^2 - xy}{xy}$

$\div \times y$  don't  
 $x - y - 1$  forget!

Factor (n) - a number in a multiplication.

$7 \cdot 4 = 28$

Factors:  $7$  product  $4$

Factor (v) - 1) To find the factors of a number.  
2) Break apart so all groups are multiplied.  
 $28 \rightarrow 7 \cdot 4$

Greatest Monomial Factor (GMF) - Stuff in Common.  
Backwards distributive property.

$3x+6$   
 $3(x+2)$

Factor.

31)  $15a - 25b + 20$

$5(3a - 5b + 4)$

39)  $6ab^2 - 8a^2b$

$2ab(3b - 4a)$

Simplify.

51)  $\frac{6p+9q}{3} - \frac{7p+21q}{7}$

$(2p+3q) - (p+3q)$

$2p+3q - p - 3q$

$p$

pg 196  
2-54 even