

Name _____

Date _____

Mr. Tallman

Homework #49 - Factoring Using GCF**Factor the following expressions using GCF.**

1) $\frac{12x}{4} - \frac{20}{4}$ GCF: 4 $4(3x-5)$	2) $\frac{4x}{2} + \frac{18}{2}$ GCF: 2 $2(2x+9)$
3) $\frac{8x}{4} + \frac{12}{4}$ GCF: 4 $4(2x+3)$	4) $\frac{20x}{20} - \frac{40}{20}$ GCF: 20 $20(x-2)$
5) $\frac{-2x}{2} - \frac{18}{2} + \frac{4y}{2}$ GCF: 2 $2(-x-9+2y)$	6) $\frac{14x}{7} - \frac{35y}{7} + \frac{21}{7}$ GCF: 7 $7(2x-5y+3)$
7) $\frac{12x^2}{3} + \frac{18x}{3} - \frac{15}{3}$ GCF: 3 $3(4x^2+6x-5)$	8) $\frac{12xy}{6} + \frac{6x}{6} - \frac{18y}{6} + \frac{12}{6}$ GCF: 6 $6(2xy+x-3y+2)$

Simplify the following by using the distributive property and/or combining like terms.

9) $(3x+7) - (9x+4)$
 $3x+7 + (-9x) - 4 \rightarrow -6x+3$

10) $(8x+7) - (5x-12)$
 $3x-5$

11) $-8(x-7) + 3x$
 $-8x+56 + 3x$
 $-5x+56$

12) $(4x-7) + (-5x-8)$
 $-1x-15$

