

Homework #55 - Factoring Using GCF**Factor the following expressions using GCF.**

1) $12x - 20$

$4(3x - 5)$

2) $4x + 18$

$2(2x + 9)$

3) $8x + 12$

$4(2x + 3)$

4) $20x - 40$

$20(x - 2)$

5) $-2x - 18 + 4y$

$2(-x - 9 + 2y)$

6) $14x - 35y + 21$

$7(2x - 5y + 3)$

7) $12x^2 + 18x - 15$

$3(4x^2 + 6x - 5)$

8) $12xy + 6x - 18y + 12$

$6(2xy + x - 3y + 2)$

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

9) $(3x + 7) - (9x + 4)$

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

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

$3x - 5$

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

$-8x + 56 + 3x$

$-5x + 56$

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

$-1x - 15$