

## Greatest Common Factor; Factoring by Grouping

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In problems 1-9, factor out the greatest common factor

1. $7x - 14$	2. $12x^4 - 4x^3 + 2x^2$
3. $-15x^8 - 3x^2$	4. $x^2y^3 - xy^5$
5. $-6x^2 + 8x$	6. $2x^{10} - 8x^2$
7. $5x^{5/2} - 10x^{1/2}$	8. $(3x-1)(x+2) + (6x+1)(x+2)$
9. $8x(x-3) + 5(x-3)$	

In problems 10-15, factor by grouping

10. $2ax - 6bx - ay + 3by$	11. $x^2 + 3x - 7x - 21$
12. $y^3 - 7y + 3y^2 - 21$	13. $5x^4 - 5x^3 + 10x^2 - 10x$
14. $ax - bx + ay - by$	15. $4ax^2 - 8a - cx^2 + 2c$