Factoring Polynomials

Emphasis on finding the GCF of a given Polynomial

Rewrite each polynomial pulling out the GCF of each:

1. $5x - 35$ $5(x - 7)$	2. $3x^2 + 27x$ $3x(x + 9)$
3. $-10x^2 + 60x$ $-10x(x - 6)$	4. $9x + 45$ $9(x + 5)$
5. $7x^2 + 21x$ $7x(x + 3)$	6. $18x^6 - 12x^3$ $6x^3(3x^3 - 2)$
7. $15x^3 + 25x^2 - 55x$ $5x(3x^2 + 5x - 11)$	8. $6x^2 - 24x$ $6x(x - 4)$
9. $14x^2 - 35x$ $7x(2x - 5)$	10. $5x^2 + x$ $x(5x + 1)$

11. $20x^2 + 44x$

$4x(5x + 11)$

12. $17x^2 + 51x$

$17x(x + 3)$

13. $36x^3 + 63x^2 - 27x$

$9x(4x^2 + 7x - 3)$

14. $3x^4 + 15x^3$

$3x^3(x + 5)$

15. $20y^4 - 15y^3 + 30y^2$

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

16. $9x^7y^5 - 3x^2y^6$

$3x^2y^5(3x^5 - y)$

17. $-2m^4 + 14m^2 - 6m$

$-2m(m^3 - 7m + 3)$

18. $-5x^2y + 35xy$

$-5xy(x - 7)$

19. $-x^2 + 5x - 6$

$-1(x^2 - 5x + 6)$

20. $12x^2y^2 + 32xy^3$

$4xy^2(3x + 8y)$