Operations with Polynomials

Emphasis on Dividing Polynomials

Divide each of the following using LONG DIVISION:

1. $(x^2 + 7x - 30) \div (x - 3)$	2. $(x^2 + 3x - 40) \div (x - 5)$
3. $(x^2 - 13x + 12) \div (x - 1)$	4. $(a^2 + 7x - 11) \div (3 - a)$
5. $(r^2 + 5x + 7) \div (1 - r)$	6. $(2x^3 - 13x^2 + 26x - 24) \div (x - 4)$
7. $(x^3 - 4x^2 + 6x - 4) \div (x - 2)$	8. $(2x^3 + 3x^2 - 4x + 15) \div (x + 3)$
9. $(3x^3 - 8x^2 + 11x - 14) \div (x - 2)$	10. $(4a^4 + 2a^2 - 4a + 12) \div (a + 2)$

11. $(6b^4 - 8b^3 + 12b - 14) \div (b - 2)$	12. $(4y^3 - 6y^2 + 4y - 1) \div (2y - 1)$
13. $(3x^4 - 5x^3 + x^2 + 7x) \div (3x + 1)$	14. $(8x^4 - 4x^2 + x + 4) \div (2x + 1)$
15. $(8y^5 - 2y^4 - 16y^2 + 4) \div (4y - 1)$	16. $(15b^3 + 8b^2 - 21b + 6) \div (5b - 4)$
17. $(6c^3 - 17c^2 + 6c + 8) \div (3c - 4)$	18. $(x^2 - 6x - 20) \div (x + 2)$
19. $(3z^4 - 6z^3 - 9z^2 + 3z - 6) \div (z + 3)$	20. $(y^5 - 3y^2 - 20) \div (y - 2)$