Adding and Subtracting Polynomials

In problems 1-2, determine the coefficient and degree of each monomial

1. $8x^3$	2. $-x^5$

In problem 3, state why each of the following is not a polynomial

3. $7x^2 + 3x^{-3}$	

In problems 4-7, determine whether the algebraic expression is a polynomial. If it is a polynomial, write the polynomial in standard form, determine the degree, and state whether it is a monomial, binomial, trinomial or just a polynomial (for 4 or more terms).

4. $7x^3 - 3x + 2$	5. $x^{\frac{1}{4}} + 3x - 2$
6. $4x + 3x^2$	7. $4 - x + x^5 + 2x^4$

In problems 8-13, simplify each polynomial by adding or subtracting.

8 $-2x^3 + 7x^3$	9. $(3x^3 - x^2 + 7x - 2) + (4x^2 - 5x + 10)$
10. $(8x^2 - 3x + 2) - (-5x^2 + 7x - 8)$	11. $(9xy - x^2 + 3x - 5) - (-7xy + x^2 + 3x - 2)$
12. $\left(\frac{1}{3}x^2 + \frac{2}{5}x\right) - \left(\frac{2}{3}x^2 - \frac{1}{2}x\right)$	13. $(10x^4 - 7x + 3) - (x^3 - x^2 - x + 2)$