Factoring Special Products

In problems 1-8, factor the difference of two squares completely

1. $x^2 - 25$	2. $x^2 - 16$
3. $49x^2 - 4$	4. $x^4 - 4y^2$
5. $x^5 - 4x^3$	6. $4x^2 - 4y^2$
7. $(3x-1)^2 - 4$	8. $256x^3 - 4x$

In problems 9-12, factor the sum or difference of two cubes

9. $x^3 - 27$	10. $2x^3 + 128$
11. $x^9 - y^6$	12. $x^3 + 1$