

Factoring Special Products - Key

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

1. $(x+5)(x-5)$	2. $(x+4)(x-4)$
3. $(7x+2)(7x-2)$	4. $(x^2+2y)(x^2-2y)$
5. $x^3(x+2)(x-2)$	6. $4(x-y)(x+y)$
7. $3(3x+1)(x-1)$	8. $4x(8x-1)(8x+1)$

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

9. $(x-3)(x^2+3x+9)$	10. $2(x+4)(x^2-4x+16)$
11. $(x^3-y^2)(x^6+x^3y^2+y^4)$	12. $(x+1)(x^2-x+1)$