Factoring Sumof Two Squares

Factor like Dots, but the 2nd term in each factor should be imaginary.

$$a^2 + b^2 = (a + bi)(a - bi)$$

Example: Factor like DOTS, but the 2nd term in each factor should be imaginary. Factor the given sum of squares completely.

1) x^2+1

$(x+1i)(x-1i)$

2) x^2+9

$(x+3i)(x-3i)$

3) $9x^2+1$

$(3x+1i)(3x-1i)$

4) $4x^2+25$

$(2x+5i)(2x-5i)$

5) $5x^2+45$

$5(x^2+9)$

$5(x+3i)(x-3i)$

6) $5x^2+80$

$5(x2+16)$

$5(x+4i)(x-4i)$