Multiplying Expressions with Complex Numbers (ALG.CN.13)

Multiply.

1. $(x - 5i)(x + 5i)$

2. $\left(x + \sqrt{10}i\right)\left(x - \sqrt{10}i\right)$

3. $\left(2x - 3\sqrt{5}i\right)\left(2x + 3\sqrt{5}i\right)$

4. $\left(3x^2 + 6\sqrt{7}i\right)\left(3x^2 - 6\sqrt{7}i\right)$

5. $(x - 3 + 2i)(x - 3 - 2i)$

6. $(x + 1 - 8i)(x + 1 + 8i)$

7. $\left(2x + 3 - \sqrt{14}i\right)\left(2x + 3 + \sqrt{14}i\right)$

8. $\left(x - \sqrt{2} + \sqrt{3}i\right)\left(x - \sqrt{2} - \sqrt{3}i\right)$

9. $\left(x - 1 - \sqrt{5} + \sqrt{3}i\right)\left(x - 1 + \sqrt{5} - \sqrt{3}i\right)$

10. $(x^2 + 3x + 5 - 2i)(x^2 + 3x - 5 + 2i)$