

Algebra 2
Review: Complex Numbers

Name _____

Date _____

Students add, subtract, multiply, and divide complex numbers. Write answers in standard form.

1. Simplify $(18 - 4i) + (48 + 7i)$.

2. Simplify $(11 - 17i) - (4 - 13i)$.

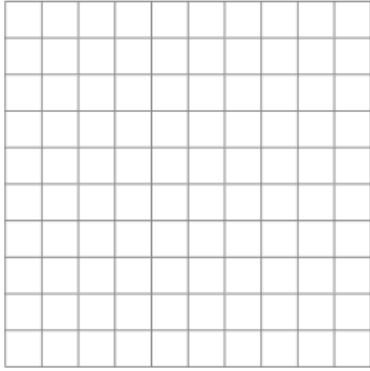
3. Simplify $(7 - i)(5 + 2i)$.

4. Simplify $3(5 - 3i) + (5 - 2i)(5 + 2i)$.

5. Simplify $\frac{3 + 2i}{2 - 3i}$.

6. Simplify $\frac{2}{6 - 2i} - 4$.

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Review: Complex Numbers

Solve quadratic equations with real coefficients that have complex solutions. Leave answers in standard form $a + bi$	Evaluate and graph complex numbers
1. Solve $\frac{1}{3}(x+2)^2 + 12 = 0$	1. Plot the following a. $-4i$ b. 3 c. $7-2i$ d. $-4+4i$. 
2. Solve by completing the square: $x^2 - 12x + 76 = 0$	2. If $i = \sqrt{-1}$, then find the following: a. i^3 b. i^{33} c. i^{249} Explain:
3. Solve using the quadratic formula: $2x^2 - 3x + 7 = 0$	

Check your answers here:

