Name _____   Date _____

Adding, Subtracting, Multiplying Complex Numbers - Guided Lesson Explanation

Explanation#1

(9 − 18i) − (12 − 6i)

Group the real part of the complex number and the imaginary part of the complex number.

= 9 − 18i − 12 -6i

Combine the like terms and simplify.

= 9 - 12 - 18i + 6i

= -3 − 12i

Explanation#2

4i(6 + 8i)

Group the real part of the complex number and the imaginary part of the complex number.

= 24i + 32i^2

Combine the like terms and simplify.

= 24i + 32(-1)

= -32 + 24i

Explanation#3

Solve (5 + 20i) + (10 + 5i)

Group the real part of the complex number and the imaginary part of the complex number.

(5 + 20i) + (10 + 5i)

= 15 + 25i

Combine the like terms and simplify.

Answer is: 15 + 25i