EdKonnect Academy
High Quality Online Tutoring

Imaginary Numbers

Questions involving imaginary numbers on the SAT are very minimal, but they are some of the easiest questions the test-taker will come across on the paper.

Let's take a looks at a sample problem below.

Problem:

Which of the following complex numbers is equal to $(5 + 12i) - (9i^2 - 6i)$, for $i = \sqrt{-1}$?

A) $-14 - 18i$

B) $-4 - 6i$

C) $4 + 6i$

D) $14 + 18i$

First, let's expand the question.

$$5 + 12i - 9i^2 + 6i$$

$$18i - 9i^2 + 5$$

Because $i = \sqrt{-1}$, we can find i^2 to be -1. Substituting $i^2 = -1$ into the equation gives us:

$$18i + 9 + 5$$

$$= 14 + 18i$$

The correct answer is option **D**.