Exercise 26

For the following exercises, perform the indicated operation and express the result as a simplified complex number.
$$(2 + 3i)(4 - i)$$

Solution

Use the distributive property.

$$(2 + 3i)(4 - i)$$

$$8 - 2i + 12i - 3i^2$$

$$8 + 10i - 3(-1)$$

$$8 + 10i + 3$$

$$11 + 10i$$