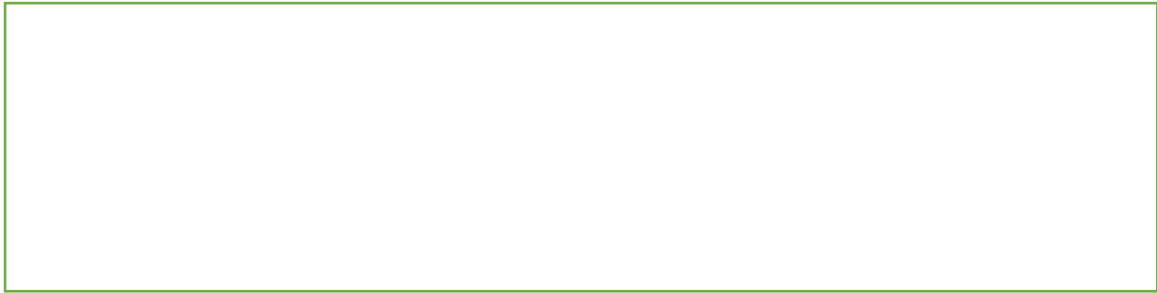


Multiplying Complex Numbers



Examples

1. Express each of the following in the form $a + bi$, where a, b are integers.

a. $(2 + 3i)(3 - 2i)$

b. $(5 - 3i)^2$

2. Determine the value of i^3 , i^4 , i^{101} and $(3i)^5$

Test Your Understanding:

1. Edexcel FP1 June 2010

$$z = 2 - 3i$$

(a) Show that $z^2 = -5 - 12i$. (2)

2. Expand and simplify $(1 + i)^3$