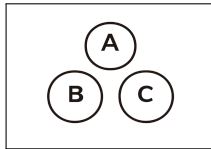


7

Basic Properties and Facts Complex Numbers

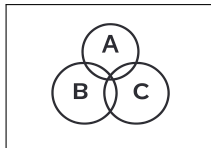
C



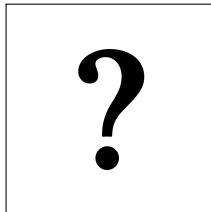
$$(6 + 7i)(8 + 9i) = 6 \times 8 + 6 \times 9i + 7i \times 8 + 7i \times 9i$$

$$(6 + 7i)(8 + 9i) = 48 - 63 + (54 + 56)i$$

$$(6 + 7i)(8 + 9i) = -15 + 110i$$



$$(a + bi)(c + di) = ac - bd + (ad + bc)i$$



$$(12 + 3i)(11 + 2i) = ?$$

7

Basic Properties and Facts
Complex Numbers

C



$$(12 + 3i)(11 + 2i) = 12 \times 11 + 12 \times 2i + 3i \times 11 + 3i \times 2i$$

$$(12 + 3i)(11 + 2i) = 132 + 24i + 33i + 6i^2$$

$$(12 + 3i)(11 + 2i) = 132 + 57i - 6$$

$$(12 + 3i)(11 + 2i) = 126 + 57i$$