Complex Numbers

Basics

Given z, y, z such that $z = x + iy$ the modulus (or absolute value) of z is given by:

$$|z| = \sqrt{x^2 + y^2}$$

Evaluate

$$(-i)^2$$

$$(2 - 3i) + (-6 - 7i)$$

$$(2 - 3i) - (-6 - 7i)$$

$$(2 - 3i)(-6 - 7i)$$

$$(x + iy)(x - iy)$$

$$(x + iy)(2 + i) = 3 - i$$

$$mod(5 + 4i)$$

Answers:

-1, $-4 - 10i$, $8 + 4i$, $-33 + 4i$, ? , ?, $x = 1, y = -1$, $\sqrt{41}$