

Complex Numbers

To add (subtract) complex numbers, add (subtract) the real parts & add (subtract) the imaginary parts, combine like terms.

Examples:

$$(3 + 2i) + (4 + 7i) \rightarrow 3 + 2i + 4 + 7i \rightarrow$$

$$3 + 4 + 2i + 7i \rightarrow 7 + 9i$$

$$(6 - 4i) - (-2 + 8i) \xrightarrow{\text{Distribute}(-)} 6 - 4i + 2 - 8i \rightarrow$$

$$6 + 2 - 4i - 8i \rightarrow 8 - 12i$$

$$(-3 - 6i) + (6 + 6i) \rightarrow -3 - 6i + 6 + 6i \rightarrow$$

$$-3 + 6 - 6i + 6i \rightarrow 3 + 0i \rightarrow 3$$