

Simplifying Complex Numbers

Simplify.

1) $(2 + 6i) - (-4 + 10i) + (-7 + 11i)$

2) $(-12 + 6i)(2 - 3i)$

3)
$$\frac{\sqrt{-16}(12 + 8i)}{4i}$$

4)
$$\frac{6 + 3i}{3 + 9i}$$

5) $(-3 - 2i)(3i + 4) + (2 - 5i)$

6) $\frac{1}{2i} - 4i + (2 + 10i)$

7)
$$\frac{13 - 4i}{(15 - 3i) - \sqrt{-49}}$$

8) $(\sqrt{-9})(12 + 5i)$