

Welcome!

- All cell phones in class.
- Try the warm-up at boards.

Operations with Complex Numbers

*Treat i like a Variable, then simplify the i .

Adding?

*Combine like-terms.

Subtracting?

*Distribute the negative to all of the terms in the $(_)$.

*Combine like-terms.

SIMPLIFY:

<p>8.) $(4 - i) + (3 + 2i)$</p> <p>$7 + i$</p>	<p>9.) $(7 - 5i) - (1 - 5i)$</p> <p>6</p>	<p>10.) $5 + (-3 - 2i) - 1(3 + i)$</p> <p>$-1 - 3i$</p>
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Multiplying?

*Distribute & combine like-terms

Remember your rules of exponents!

<p>11.) $3i(5 - 2i)$</p> <p>$15i - 6i^2$ $15i - 6(-1)$</p> <p>$6 + 15i$</p>	<p>12.) $(2 + 4i)(1 - 7i)$</p> <p>$2 - 14i$ $4i - 28i^2$</p> <hr/> <p>$2 - 10i - 28(-1)$ $2 - 10i + 28$</p> <p>$30 - 10i$</p>	<p>13.) $(5 - 2i)(4 - 8i)$</p> <p>$20 - 40i$ $- 8i + 16i^2$</p> <hr/> <p>$20 - 48i + 16(-1)$ $20 - 48i - 16$</p> <p>$4 - 48i$</p>	<p>14.) $(5 + 3i)(5 - 3i)$</p> <p>$25 - 15i + 15i - 9i^2$ $25 - 9(-1)$ $25 + 9$</p> <p>34</p>
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