5-9 Operations with Complex Numbers

Warm Up

Express each number in terms of *i*.

1. $\sqrt{-81}$

2. $-\sqrt{-18}$

Find each complex conjugate.

3. $6 - i\sqrt{3}$

4. $4i + \sqrt{2}$

Find each product.

5. $(2 + \sqrt{2})(3 - \sqrt{2})$

6. $(6 + 3\sqrt{3})(1 + \sqrt{3})$

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5-9 ## Operations with Complex Numbers

Warm Up

Express each number in terms of i.

1. $\sqrt{-81}$ **9i**

2. $-\sqrt{-18}$ **$-3i\sqrt{2}$**

Find each complex conjugate.

3. $6 - i\sqrt{3}$ **$6 + i\sqrt{3}$**

4. $4i + \sqrt{2}$ **$\sqrt{2} - 4i$**

Find each product.

5. $(2 + \sqrt{2})(3 - \sqrt{2})$ **$4 + \sqrt{2}$**

6. $(6 + 3\sqrt{3})(1 + \sqrt{3})$ **$15 + 9\sqrt{3}$**

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