

Complex Conjugates

Two complex numbers in the form $a + bi$ and $a - bi$ are called complex conjugates. The product of two conjugates is always a real number.

11. $(8+i)(8-i)$

12. $(5-4i)(5+4i)$

Dividing Complex Numbers

*Watch out! "i" can not be in the denominator of a complex number.

• If the denominator is a monomial: Multiply top and bottom by "i"

• If the denominator is a binomial: Multiply top and bottom by the conjugate.

13. $\frac{10}{2i}$

14. $\frac{4}{-9i}$

22. $\frac{18}{9i}$

15. $\frac{28-8i}{4i}$

16. $\frac{-8-2i}{6i}$

17. $\frac{1}{2i}$

18. $\frac{-5-2i}{6i}$

19.

21.

$\frac{8+4i}{2i}$

$\frac{4+i}{-9i}$

$\frac{-35-15i}{5i}$

19.