

NAME: _____ Score _____/10

Please **print** your name

1. **T** F Every Real Number is a Complex Number.
2. T **F** Every Complex Number is a Real Number.
3. **T** F The norm of a Complex Number is a Real Number.
4. T **F** The conjugate of a Complex Number is a Real Number.
5. Perform the indicated addition and write the result in standard form.
 $(3 + 5i) + (-2 + i) = \mathbf{1 + 6i}$
6. Perform the indicated subtraction and write the result in standard form.
 $(3 + 5i) - (-2 + i) = \mathbf{5 + 4i}$
7. Perform the indicated multiplication and write the result in standard form.
 $(3 + 5i)(-2 + i) = \mathbf{-6 + 3i - 10i + 5i^2 = -6 - 7i - 5 = -11 - 7i}$
8. What is the real component of the complex number $-2 + i$?
-2 is the real component.
9. What is the complex component of the complex number $-2 + i$?
1 is the complex component.
10. What is the conjugate of the complex number $3 - 5i$?
3 + 5i is the conjugate of 3 - 5i.