

Complex Numbers Worksheet

STUDY THIS WORKSHEET FOR THE QUIZ!!!

Name _____

Class _____ Period _____

Date _____

1. For the complex number $-10+4i$, identify the real number and the imaginary number.

2. Write the conjugate of each.

A) $-2+4i$

B) $3-2i$

3. Evaluate.

a) i^6

b) i^{11}

c) i^{24}

4. Write the expression as a complex number in standard form.

a) $-i+(7-5i)-3(2-3i)$

b) $3i(6-5i)$

c) $i(2+i)$

d) $(2+3i)(1-4i)$

e) $(3-2i)^2$

f) $(2i)(1-4i)(1+i)$

5. Write the expression as a complex number in standard form.

a) $\frac{5}{1+i}$

b) $\frac{3-3i}{4i}$

c) $\frac{4+4i}{2-9i}$

6. Solve each equation.

a) $4x^2+20=0$

b) $4x^2+5=-7$

c) $x^2=8x-35$

d) $x^2+4x=-29$

e) $8r^2+4r+5=0$

f) $6p^2-8p=-3$