IM2: Complex Numbers: Basic Operations Practice

Name:_____Date:_____Period:____

Simplify each radical expression:

1) $\sqrt{-54}$ 2) $3\sqrt{-150}$ 3) $-2\sqrt{-52}$ 4) $3+\sqrt{-16}$

Perform the operation:

5) $(2+3i)+(3-5i)$ 6) $(-3+7i)-(-5+10i)$

7) $(2+3i)(3-5i)$ 8) $(-3+7i)(-5+10i)$

9) $i^{22}=$ 10) $i^{25}=$ 11) $i^{55}=$ 12) $i^{56}=$

13) Select all classifications that apply to each number

	$\sqrt{-9}$	0	2π	$-\sqrt{16}$	$\sqrt{71}$	$0.333...$	$2+i$
Rational							
Real							
Natural							
Complex							
Imaginary							
Whole							
Irrational							
Integers							

Simplify:

14) $\dfrac{4-\sqrt{-36}}{-2}$

15) $\dfrac{2+\sqrt{20-36}}{2}$

Solve, using the Quadratic Formula:

16) $2x^2-7x-4=0$

17) $x^2-9x+39=0$