FMPC 10

Name:_____

Date:_____

Classification of Numbers and Laws of Exponents
In-Class Assignment

/28

[10] **1.** Identify all the number sets/groups in which a given number belongs. Use the symbols for the number sets and a capital W for whole numbers.

Number	Sets/groups
$\sqrt{-36}$	
-1	
π	
$\frac{2.3}{6}$	
-4^2	
125	
$\sqrt{121}$	
15.25	
$\sqrt{13}$	
$\frac{110}{55}$	

[2] **2. Circle** the base in each algebraic expression or number.

$\frac{(4x^7)}{15}$	$-(5)^4$	$-(-8a)^5$	$(15z^8)^3$

[16] **3. Simplify.** Do not evaluate. **If the result has a negative exponent, rewrite your answer with a positive exponent.**

$b^{-5}b^{2}$	$\dfrac{(a^{3})^{-7}}{xa^{25}}$
$6xx^{-3}$	x^{0} *where* $x \neq 0$
$\left[\dfrac{(a^{2})^{-5}}{6a^{6}}\right]^{2}$	$2x^{5}x^{-6}$
$\{[2x^{5}x^{-6}]^{2}\}^{-3}$	$\left[\dfrac{(x^{-3})^{-1}}{(6a^{6})^{0}}\right]^{5}$