

**Classification of Numbers and Laws of Exponents
Quiz**

/20

[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
$\sqrt{5}$	
-12.3	
π	
$\frac{2}{7}$	
5^2	
1000	
$\sqrt{-49}$	
-157	
0	
$\frac{1}{3}$	

[2]

2. Circle the base in each algebraic expression or number.

$\frac{2x^3}{7}$	-5^4	$(-3)^5$	$15y^8$
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[8]

3. Simplify. Do not evaluate.

b^4b^3	$\frac{(x^3)^7}{x^{15}}$
$2a^5a$	b^0 where $b \neq 0$

Accept the challenge and simplify the following:

$$\frac{(a^2b^4c^3)}{(ab^5)^{-2}}$$