Name: $\qquad$ Date: $\qquad$

## The Classification of Numbers



## Across

2. the difference between whole numbers and integers are the
3. 

$=$
13. a whole number; a number that is not a fraction
14. $-1 / 3=-0.333333333$ is not an
15. a number that can be expressed in the form a + $b i$, where $a$ and $b$ are real numbers and $i$ is the imaginary unit, that satisfies the equation i2 $=-1$. In this expression, $a$ is the real part and $b$ is the imaginary part of the complex number.
16. the positive integers (whole numbers) $1,2,3$, etc., and sometimes zero as well.
17. The difference between complex numbers and real numbers is that complex numbers give
expressions and more! for the following
19. the only difference between natural numbers and whole numbers is the
= Whole numbers + the
20. All integers are
21. The type of number we normally use, such as $1,15.82,-0.1,3 / 4$, etc. Positive or negative, large or small, whole numbers or decimal numbers are all Real Numbers.
22. $\qquad$ = rational numbers

+ irrational numbers

24. Among the different types of numbers,

## understand

25. Irrational numbers are numbers that

## Down

1. $1 / 3=0.3333333$ and 0.3333333 is a decimal
2. (of a number, quantity, or expression) not expressible as a ratio of two integers, and having an infinite and nonrecurring expansion when expressed as a decimal. Examples of irrational numbers are the number $\pi$ and the square root of 2 .
3. a numerical quantity that is not a whole number (e.g., 1/2, 0.5).
4. (of a number, quantity, or expression) expressible, or containing quantities that are expressible, as a ratio of whole numbers. When expressed as a decimal, a rational number has a finite or recurring expansion.
5. a number without fractions; an integer. 8. $J(9)$ is a $\qquad$ because $\int(9)=$
3
6. are neither
repeating decimals nor terminating decimals
7. Natural numbers + zero
8. the opposite of complex numbers are
9. Fractions can be written as a decimal or a repeating

## decemal

$=3.14 \ldots, 2.224879566117426874, \delta(7)$
18. $\qquad$ all fractions are integers
23.

