$\qquad$
Number Classification Worksheet

1) Re-write each number in the Venn Diagram where it belongs.

| -19 | $1 . \overline{2}$ | 0 | 3 |
| :--- | :--- | :--- | :--- |
| $\sqrt{10}$ | $\sqrt{81}$ | 3.456 | $-6 / 11$ |
| $-1.48298 \ldots$. |  | $\Pi+3$ | -44 |

where
3

$-6 / 11$
-44

2) List all classifications of the number.
a) $\sqrt{10}$ $\qquad$
b) -44
C) 3 $\qquad$
d) $-6 / 11$ $\qquad$
3) Check all boxes that apply to the number.

|  | Natural | Whole | Integer | Rational | Irrational | Real |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) | $\sqrt{81}$ |  |  |  |  |  |  |
| b) | $1 . \overline{2}$ |  |  |  |  |  |  |
| c) | 0 |  |  |  |  |  |  |
| d) | 13 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

True or False? If false, correct the statement.
4) If a number is in integer, then the number is also rational. $\qquad$
5) If a number is real, then it is also rational. $\qquad$
6) 3.456 is an irrational number. $\qquad$
7) $\sqrt{11}$ is a real number. $\qquad$
8) Zero is an natural number. $\qquad$
9) 9 is an integer. $\qquad$
10) If a number is natural, then it also whole. $\qquad$

## Short Answer.

11) Name a number that is an integer, but not whole. $\qquad$
12) Give an example of an irrational number that was not already used on this worksheet or our notes. $\qquad$
13) Give an example of a rational number that was not already used on this worksheet or our notes. $\qquad$

SELECTED ANSWERS BELOW: (the rest will be shown in class tomorrow)
2) a) irrational, real
c) natural, whole, integer, rational, real
3) a) check all boxes except irrational
c) check whole, integer, rational, and real (not natural, not irrational)
5) False. Real numbers can be irrational too.
7) True.
9) True.
11) Examples: $-3,-21,-10 \ldots$ (any negative number without fraction or decimals would work).
13) Any number would work as long as it did not go on forever in an un-repeating pattern.

