## Whole Numbers:

## Integers:

## Rational Numbers:

## Classify the following numbers using all names that apply:

a) 5
b) 0.6
c) -7
d) $-2 \frac{2}{3}$
e) -24
*On a number line, where are larger numbers located?

Where are smaller numbers located?

So the biggest number is always...

Compare using: $>,<$, or $=($ fill in the missing space $)$
Ex: - 17 $\qquad$ 14

Ex: - 22 $\qquad$ $-15$

Ex: 5.2 $\qquad$ 5.2003

Ex: 0.31 $\qquad$ 0.301

## Some Helpful Hints to Comparing Numbers:

1. Positive numbers are always $\qquad$ than negative numbers
2. When comparing two negative numbers, the number with the $\qquad$ absolute value is actually bigger.
3. When comparing decimals, positive or negative, you usually need the same number of
$\qquad$
4. To compare fractions, the $\qquad$ need to be the same.
5. To compare fractions to decimals, they either need to both be $\qquad$ or both be

## Change the following decimals to fractions:

a) 0.77
b) 0.64
c) 0.375

Simplify the following fractions: (do NOT use long division)
a) $\frac{0.5}{10}$
b) $\frac{26}{1.3}$
c) $\frac{8}{1 / 2}$

Order the following numbers from least to greatest, then classify each number using all names that apply:

Ex: $-0.03,0.21,0.09,-0.22$


Ex: $4.5,-\frac{3}{4},-2.1,0.5$
Ex: 3, -1.2, $-2,0$


Ex: 3.6, $-1.5,-0.31,-2.8$


Ex: The apparent magnitude of a star is its brightness as observed from Earth. The greater the magnitude, the dimmer the star. Order the stars from brightest to dimmest.

| Star | Arcturus | Sirius | Vega |
| :--- | :--- | :--- | :--- |
| Magnitude | -0.6 | -1.47 | 0.03 |

## Absolute Value:

For the following numbers, find the opposite of each number and the absolute value of each number.
$-a$
$|a|$

Ex: $a=-2.5$

Ex: $x=\frac{3}{4}$

Ex: $y=\frac{3}{8}$

Ex: $b=-0.6$

Ex: $|-2-3|$
Ex: $|-6-(-2)|$
Ex: $|-5-9|$

