Name: $\qquad$

## Guided notes 1a: Number Concepts

A SET is ....
All of the numbers that we use are $\qquad$ . (Yes, there are imaginary numbers.)
$\square$

| Natural numbers are ... | Whole numbers are ... |  | Integers are ... |
| :---: | :---: | :---: | :---: |
| AKA |  |  |  |
| Examples: | Examples: |  | Examples: |
| Rational numbers are anything that can be written as a $\qquad$ or $\qquad$ or $\qquad$ |  | Irrational numbers CANNOT be written as a$\qquad$ . They include$\qquad$ and some famous constants, such as $\qquad$ and $\qquad$ |  |

To compare rational numbers, we can use a few methods:

Inspection: $\qquad$
e.g.,

Common denominator: Use if you have two $\qquad$
e.g.,

Convert to decimals: Use if you have $\qquad$
e.g.,

Which number is larger -
$11 / 5$ or $43 / 20$ ?

4/5 or 0.82 ?
$6 . \overline{4}$ or $\sqrt{40}$ ?

Tips for drawing a number line:

- Always use a $\qquad$
- When in doubt, put $\qquad$ in the middle
go on both ends of the line
Put the following numbers in order on the number line: $\quad 0.5,4 / 3, \sqrt{6}, 1 . \overline{6}$

