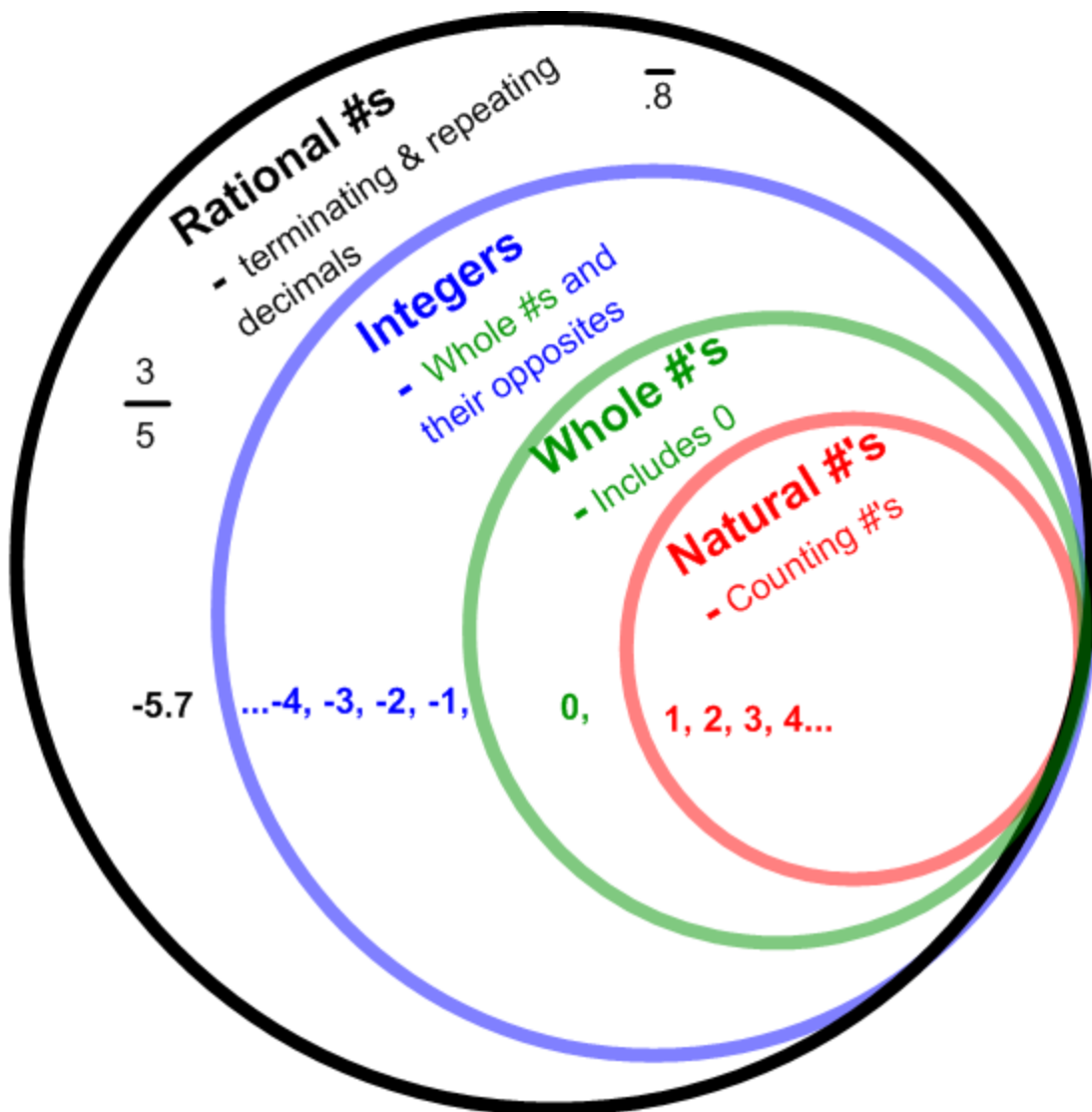# SOL 6.3 – Integers

**The Meaning of Integers**

- **Whole numbers** and their **opposites**.
- Ex.  5,   -2,    436,   -792
- **Right** is **correct,** so it is **positive**



Rational #s
- terminating & repeating decimals

.8

Integers
- Whole #s and their opposites

Whole #'s
- Includes 0

Natural #'s
- Counting #s

$\dfrac{3}{5}$

-5.7    ...-4, -3, -2, -1,        0,       1, 2, 3, 4...

## Integer Vocabulary

| Negatives | Positives |
|---|---|
| Left – West | Right – East |
| Down – South | Up – North |
| Bottom | Top |
| Lose – loss | Gain |
| Decrease | Increase |
| Backwards | Forwards |
| Withdrawal | Deposit |
| Below sea level | Above sea level |

## Inequalities
- **<** Less than
- **≤** Less than or equal to
- **>** Greater than
- **≥** Greater than or equal to

## Comparing and Ordering Fractions

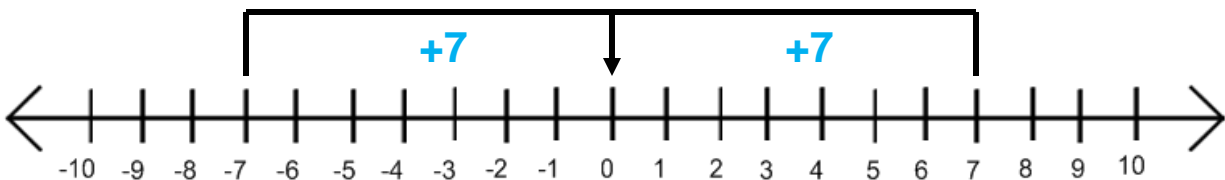- ascending - goes up or gets bigger
- Descending - goes down or gets smaller

# SOL 6.3 – Absolute Value

## The Meaning of Absolute Value

- **The distance from zero**.
- Symbol for absolute value **| |**

## How to Find Absolute Value

- When finding the absolute value of an integer, find the distance from zero on a number line.
- Because distances are positive, so is every absolute value.
- Opposite integers will have the same absolute value since they are both the same distance from zero.



## Practical Problem involving Absolute Value



Ryan and Chloe were at Jacob's house. Ryan rode his bike 3 miles west of Jacob's house, and Chloe rode her bike 3 wiles east of Jacob's huse. Who traveled a greater distancefrom Jacob's house?

Ryan and Chloe both traveled the same distance from Jacob's house since each traveled 3 miles in opposite directions.

## Examples of Absolute Value

$|+7| = +7$,  $|-7| = +7$,  $|-28| = +28$,  $|+12| = +12$,  $|-5| = +5$,  $|-167| = +167$

$|+7| + 7 = +14$,  $|-7| + 7 = +14$,  $|-28| - 16 = +12$,