# 5.2 Absolute Value

*Objective: To understand opposites and absolute value*

# Opposites

What is the opposite of up?
   down

What is the opposite of down?
   up

What is the opposite of right?
   left

What is the opposite of north?
   south

What is the opposite of 5?
   -5

What is the opposite of the opposite of 5?
   5

# Opposites (change sign)

What is the opposite of 25?

25

What is the opposite of -3.8?

3.8

What is the opposite of the opposite of -18?

-18

What is the opposite of the opposite of 26?

26

# Absolute Value

**Absolute Value** - A numbers distance from zero on the number line.  The symbol is $|\ |$ .

     - **Absolute value is ALWAYS positive**

1) $|3| = 3$

2) $|-3| = 3$

3) $|-2.3| = 2.3$

4) $-|-3| = -3$

5) $-|15| = -15$

6) $|0| = 0$

# Absolute Value and Expressions

7) $|3| + |-12|$

3 +12

15

8) $|-3| + |12|$

3 +12

15

9) $|-21| - |-15|$

21-15

6

7) $|-1.5| + |-6|$

1.5+6

7.5

Which number is bigger?

10) $|-21|$ $or$ $|12|$

21 or 15

$|-21|$

11) $|-2.5|$ $or$ $|2.25|$

2.5 or 2.25

$|-2.5|$