5.3 Compare and Order Integers
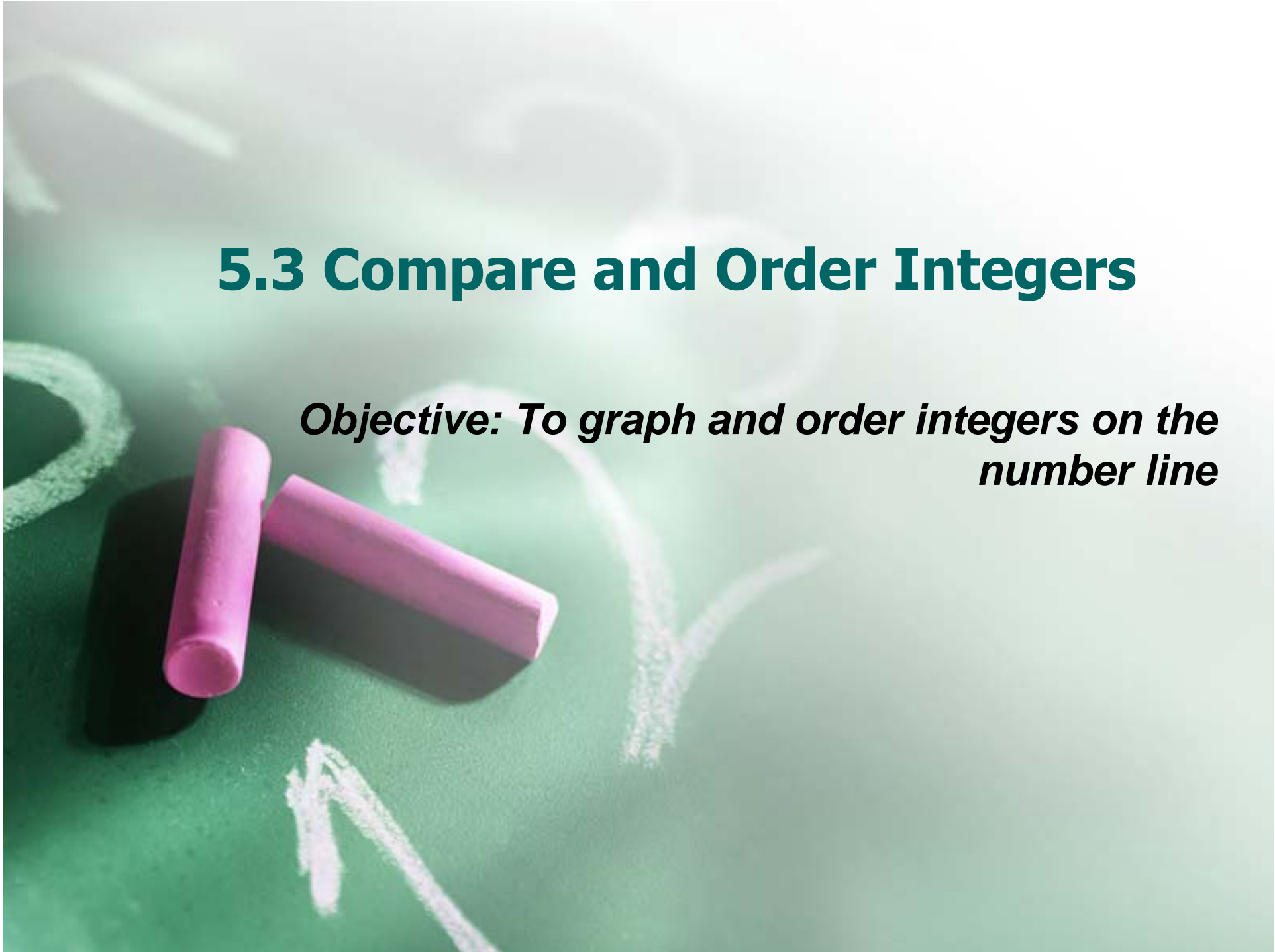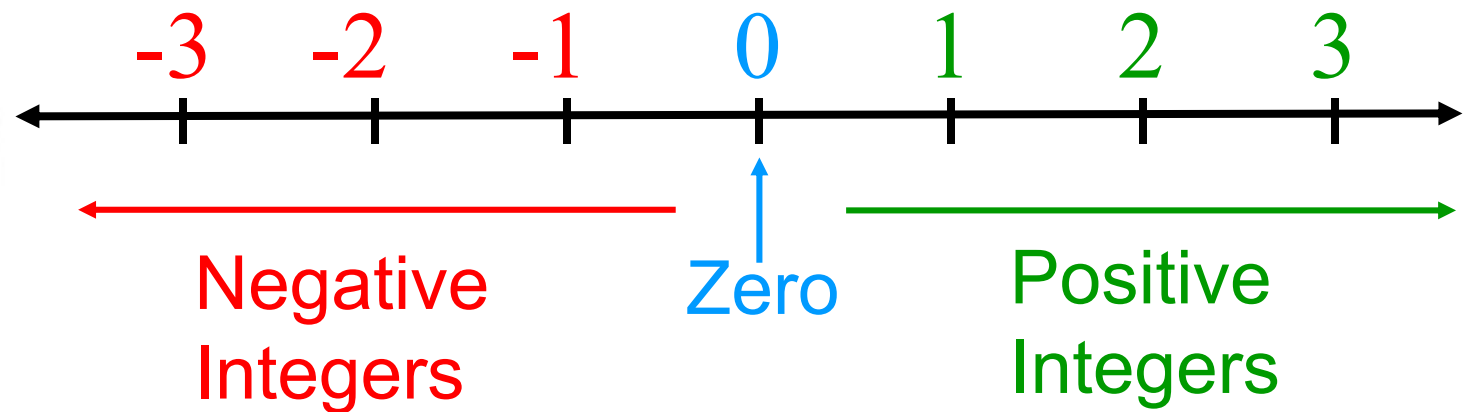
Objective: To graph and order integers on the number line

Integers – The set of positive and negative WHOLE numbers and zero

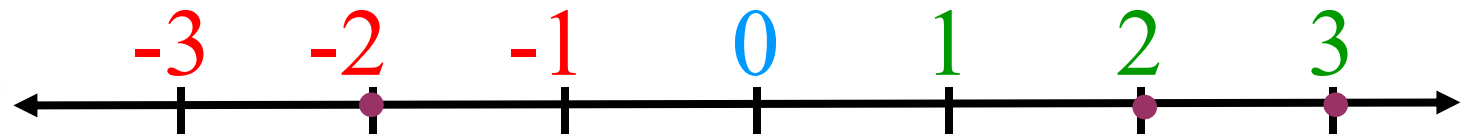{… -3, -2, -1, 0, 1, 2, 3 …}

-3 -2 -1 0 1 2 3

Negative Integers   Zero   Positive Integers

Note: The numbers to the right are **LARGER** than the numbers on the left!!

To Graph Integers

Example: Graph the integers on a number line
2, -2, 3

-3 -2 -1 0 1 2 3

Comparing Symbols - Inequalities

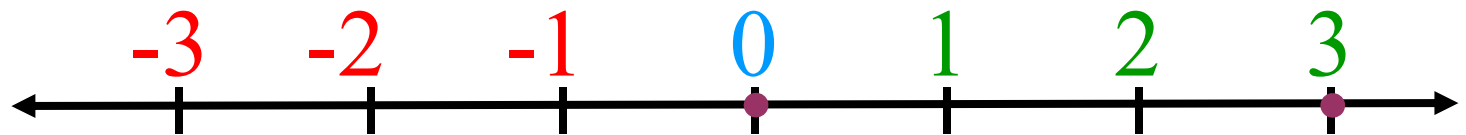| Symbol	Name
=	Equal To
<	Less Than
>	Greater Than
≤	Less Than OR Equal To
≥	Greater Than OR Equal To

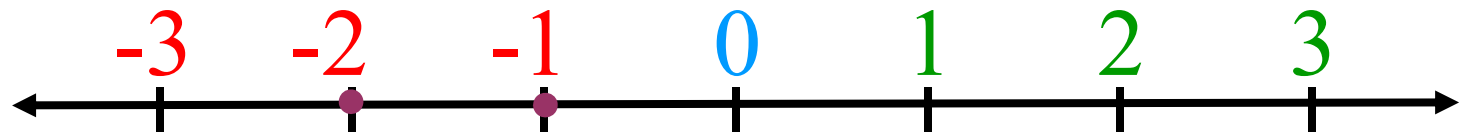# To Compare Integers

Step 1: Plot the integers on the number line
Step 2: The number to the left is smaller

Example: Complete using <, >, or =

1) 3 $\boxed{>}$ 0

$$-3 \quad -2 \quad -1 \quad 0 \quad 1 \quad 2 \quad 3$$

2) -1 $\boxed{>}$ -2

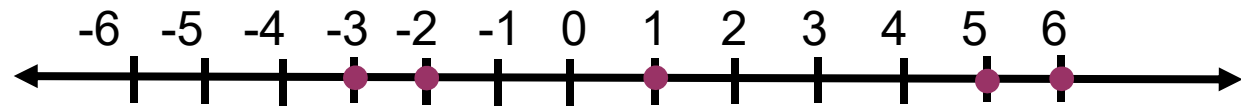$$-3 \quad -2 \quad -1 \quad 0 \quad 1 \quad 2 \quad 3$$

To Order Integers

Step 1: Plot the integers on the number line
Step 2: List the integers in order

Example: Order the integers from least to to greatest -3, 6, -2, 1, 5,

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

Answer: -3, -2, 1, 5, 6

Integers in Real Life

Ascend -To rise. A positive (+) number

Descend -To fall or decrease. A negative (-) number

Write an integer and describe the meaning of zero.

1) 13 degrees below zero

-13 degrees, The integer 0 represents 0 degrees

2) A submarine descends 120 feet

-120 feet, The integer 0 represents sea level