

# Eureka Math Module 3, Topic A, Grade 6

**Module 3, Topic A – Positive &  
Negative Numbers**

# Module 3 Topic A Notes

- Start these notes on a clean sheet of paper in your composition notebook.
- Write the title of the lesson notes at the top of the paper.
- Start each lesson notes on a clean sheet or back of a sheet in your composition notebook with the title of the lesson notes at the top of the paper.
- Notes for the day should be completed prior to coming to class.

# Lesson 1 – Positive & Negative Numbers on the Number Line

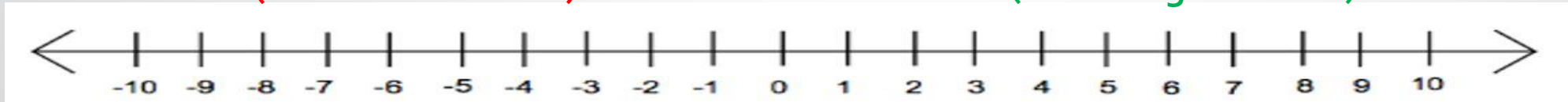
- *Vocabulary:*
  - *Define the terms below in Frayer Models in your composition notebook. Include the definition, description, and 2 examples. You may use sticky notes if necessary.*
- **Positive Number** – a number greater than zero
- **Negative Number** – a number less than zero
- **Integer** – Positive and negative whole numbers, including zero
- **Opposite** – numbers that are the same distance from zero
- **Number Line** – a diagram that shows integers listed in order from least to greatest using equal spaces.

# Lesson 1 – Positive & Negative Numbers on the Number Line

- *Number Lines – copy into composition book*

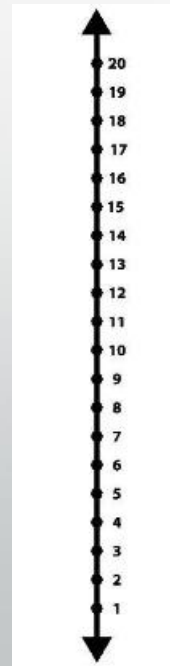
Negative Numbers  
(To the Left of Zero)

Positive Numbers  
(To the Right of Zero)



Horizontal  
Number Line

Vertical Number  
Line



Positive Numbers  
(Above Zero)

Negative Numbers  
(Below Zero)

# Lesson 1 – Positive & Negative Numbers on the Number Line

- *Copy notes into composition notebook.*
- Objective:
  - I can locate positive and negative integers, and their opposites, on the number line.
- Guiding Question:
  - Give an example of two opposite numbers.
  - Describe their locations first on a horizontal number line and then on vertical number line.

# Lesson 1 – Positive and Negative Numbers on the Number Line

*Copy notes into your composition notebook.*

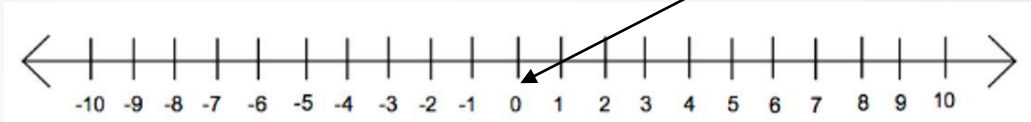
- Zero always lies between two opposite numbers.
- Opposite numbers are the same distance from zero.
- The opposite of Zero is Zero.

## How to Plot a Point on the Number Line:

EX: Locate positive 8 on the number line.

**Step 1: Start at 0 (zero) on the number line.**

**Start  
here**

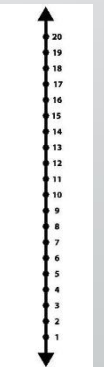


**Step 2: Move to the right for positive numbers on a horizontal number line (move up on a vertical number line). Move to the left for negative numbers on a horizontal number line (move down on a vertical number line).**

“For this example, move 8 units to the right.”

**Step 3: Place a dot on the number line.**

“For this example, place a dot at positive 8.”

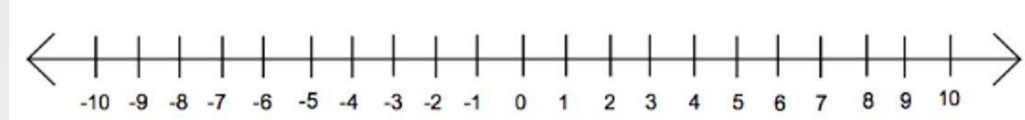


# Lesson 1 – Positive and Negative Numbers on the Number Line

## How to Locate Opposites on the Number Line:

EX: Locate positive 4 and its opposite on the number line.

**Step 1: Start at 0 (zero) on the number line.**



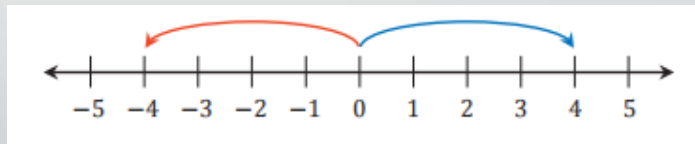
**Step 2: Move to the right for positive numbers. Move to the left for negative numbers.**

“For this example, move 4 units to the right.”

**Step 3: Go back to 0 (zero). Move the same amount of units in the opposite direction.**

“For this example, move 4 units to the left (opposite direction).”

Both 4 and -4 are four units from 0 (zero).



## Lessons 2 & 3 – Real World Positive and Negative Numbers and Zero

- *Vocabulary:*
  - *Define the terms below in Frayer Models in your composition notebook. Include the definition, description, and 2 examples. You may use sticky notes if necessary.*
- **Scale** – what you count by on a number line
- **Interval**– the distance between two tick marks on a number line



## Lessons 2 & 3 – Real World Positive and Negative Numbers and Zero

- *Copy into your notebooks.*
- Objective: I can represent real world situations with integers.
- Guiding Questions:
  - Give an example of clue words that represent negative numbers.
  - Give an example of clue words that represent positive numbers.
  - Create an example using your clue words and plot on a number line.

## Lessons 2 & 3 – Real World Positive and Negative Numbers and Zero

- *Copy into your notebooks.*

### Positive Words

Gain

Deposit

Credit

Receive

### Negative Words

Loss

Charge

Debit

Withdraw

*Add at least two more words to each column*

# Lessons 2 & 3 – Real World Positive and Negative Numbers and Zero

*Copy notes into your composition notebook.*

- A number line must have a scale with equal intervals
- A scale must be written correctly before plotting points.
- Always start a zero when plotting a point.

## How to Number a Number Line:

**Step 1: Count the number of tick marks that are on the number line.**

Start here



**Step 2: Determine where will you write zero (in the middle of the number line) and write zero first.**

**Step 3: Choose your scale (what you will count by).**

**Step 4: Count outward from zero using your scale.**

**\*\*\*Remember a scale is like a multiple, count by 1's, 2's, 5's, 10's, etc.\*\*\***

