

Compare and Order Integers

Lesson 9-3

Name: _____ **Date:** _____ **Class:** _____

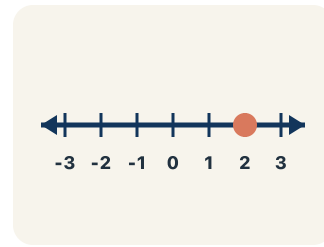
Key Vocabulary Level 2 Standard

Picture first, then the word, then a plain-language meaning. Say each word out loud.

-3 < 2 because -3 is farther left on the number line than 2

Compare

Write the definition:



Least to greatest: -5, -2, 0, 3, 7 (left to right on the number line)

Order

Write the definition:

4 > -1 because 4 is to the right of -1 on the number line

Greater than

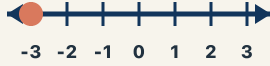
Write the definition:

-6 < -2 because -6 is farther left — it is farther from zero

Less than

Write the definition:

negative ← 0

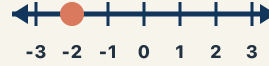


-4 is 4 units to the LEFT of zero on the number line

Negative integer

Write the definition:

...-2, -1, 0, 1, 2...



..., -3, -2, -1, 0, 1, 2, 3, ...

Integer

Write the definition:

Guided Notes Level 2 Standard



WHAT WE'RE LEARNING TODAY

I can compare and order integers using a number line.



Fill in each blank as we go. Use the Word Bank to help you.



WORD BANK – FILL EACH BLANK WITH THE BEST WORD

Compare

Order

Greater than

Less than

Negative integer

Integer



Tap any word to see what it means and a picture.

1 To decide which number is larger or smaller is to them.

2 To arrange numbers from least to greatest or greatest to least is to them.

3 On a number line, a number farther to the right is another number.

4 On a number line, a number farther to the left is another number.

5 An integer less than zero, like -6 , is a .

6 A whole number or its opposite is an .



Watch & Try – Worked Examples

See the notes in action: watch one worked all the way through, then try the next with the same steps.

 **I do – watch**


Follow each step as your teacher solves it.

Problem: Which statement is TRUE?

- A. $-3 > -1$
- B. $-5 < -2$
- C. $-4 > 0$
- D. $-1 < -6$

Step 1 -5 is farther to the left on the number line than -2 , so $-5 < -2$ is true.

 **Answer:** B. $-5 < -2$

 **We do – together**

Solve this one with your class using the same steps.

Problem: Which integer is the LEAST: -3 , 5 , -8 , 2 , 0 ?

- A. -8
- B. -3
- C. 0
- D. 5

Step 1 _____

Step 2 _____

Answer: _____

 **You do — your turn**

Now try one on your own. Show every step.

Problem: What is $|-8|$?

- A. 8
- B. -8
- C. 0
- D. -16

Show your work:

Try It

Solve on your own. Check the answer key when you are done.

1. Three buried chests sit at -9 m, -4 m, and -15 m below sea level. Which chest is at the GREATEST elevation (closest to the surface)?

- A. -4 m
- B. -9 m
- C. -15 m
- D. They are equal

Show your work:

2. On the map, a sunken lantern is at -8 m and a coral shelf is at -3 m. Which symbol makes the comparison true: -8 ____ -3 ?

- A. $<$
- B. $>$
- C. $=$
- D. \geq

Show your work:

Stretch Your Thinking

Level 2 enrichment

Challenge task — explain your reasoning in full sentences.

A student says: 'Negative numbers are always less than positive numbers, so -100 is less than 1.' Is this correct? Now the student says: '-100 is less than -1 because 100 is greater than 1.' Is THIS correct? Explain the difference.

Sentence starter: The first statement is ___ because ___. The second statement is ___ because with negative numbers, ___. On the number line, -100 is ___ of -1, so ___.

Show your work:

Reflect — Exit Ticket

Which list shows the integers in order from LEAST to GREATEST?

- A. -2, -5, 0, 3, 7
- B. 7, 3, 0, -2, -5
- C. -5, -2, 0, 3, 7
- D. 0, -2, -5, 3, 7

Your answer:
