Name:_____ Date:_____

Ms. Napolitano Integers

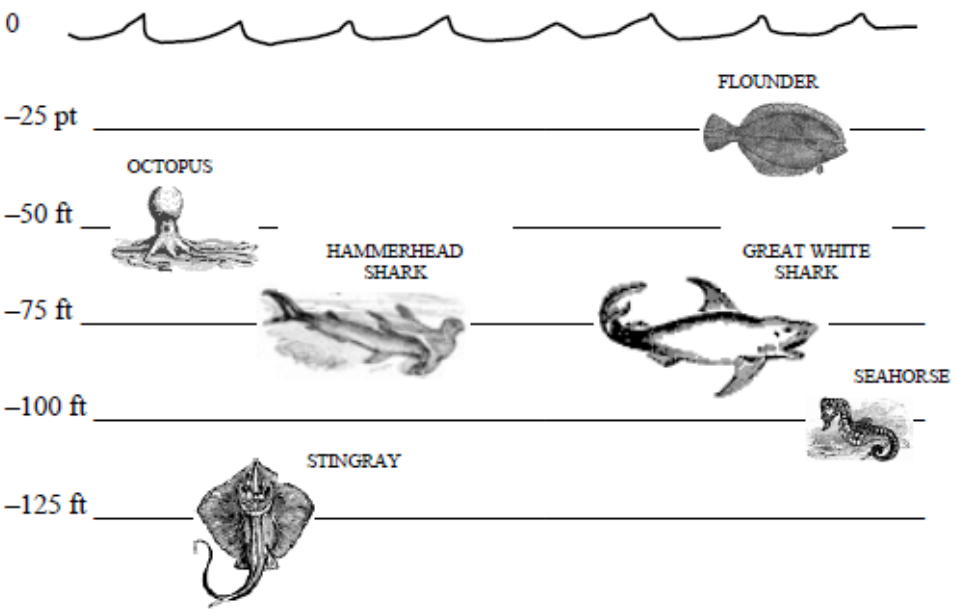
I can : _____

Try Now (01)

Directions: Using the picture below, answer the following questions.

1. What sea creature is at a depth of –100ft? _____
2. The stingray is how many feet below the surface? _____
3. Which two sea creatures are at the same depth?
   _____
4. What is the depth of the octopus? _____
5. Give the absolute value for the following depths:

   a. | -25 | b. |100 | c. | -50 |



Bonus: Which of these sea creatures do you like the most and why?

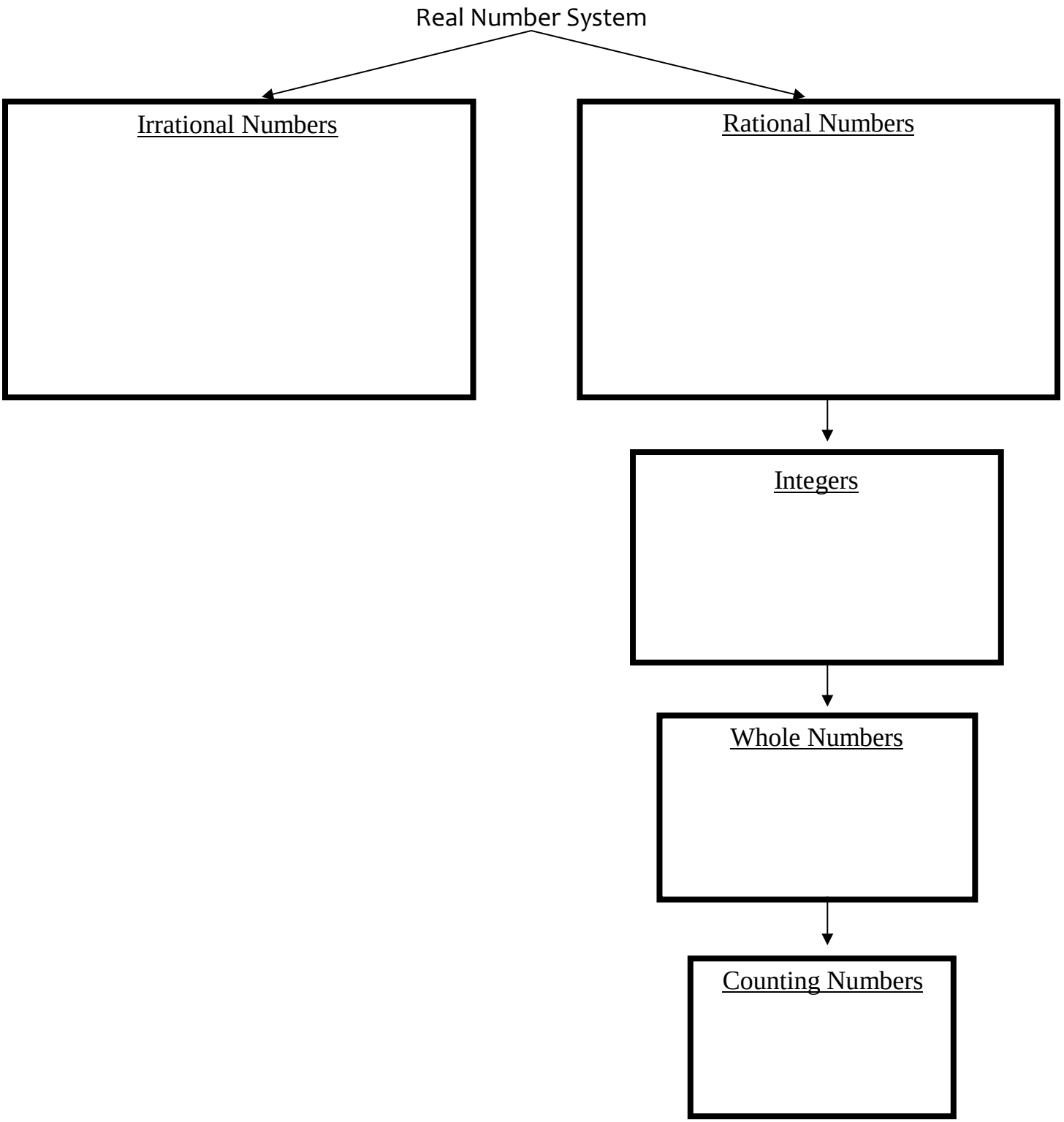
_____

_____

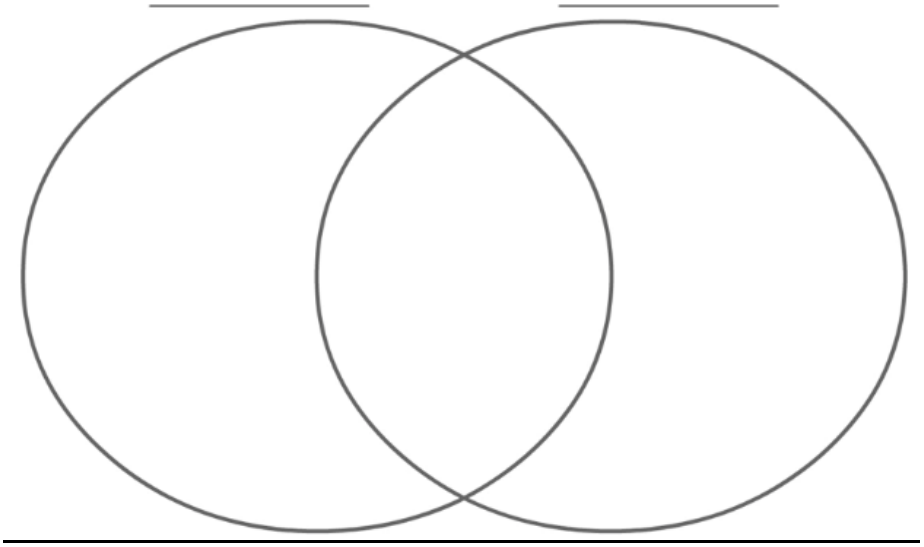
Name:_____ Date:_____

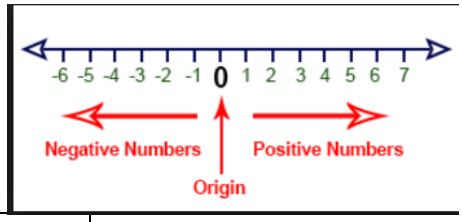
Ms. Napolitano Integers

Topic: Addition of Positive and Negative Integers



Think-Pair-Share



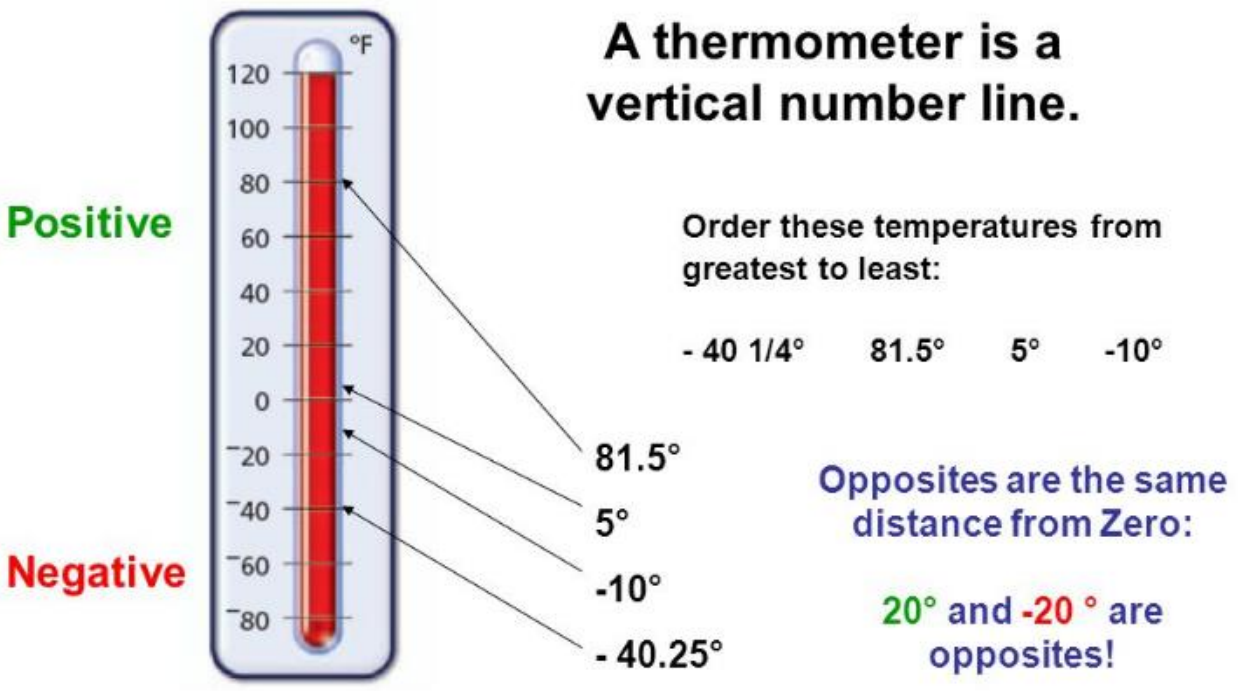


Academic Vocabulary

Vocabulary word(s)	Definition	Examples
Positive Numbers		
Negative Numbers		
Opposite		

Stop and Jot

Write down real world examples where both positive and negative integers are used.



Model

Ms. Napolitano owed her mother $9 dollars. On Sunday Ms. Napolitano gave her mother $5 back, how much money does Ms. Napolitano still owe her mother?

a) **Write the integer for the amount of money Ms. Napolitano owes her mother.**

_____

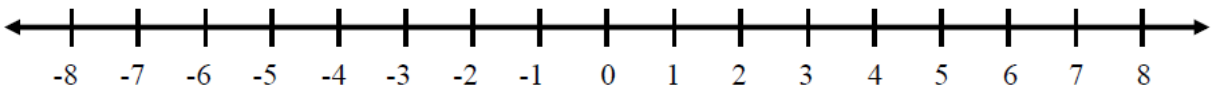
b) **Write the integer for the money that she gave her mother back.**

_____

c) **Create a equation that represents this situation. Use x, for the amount of money Ms. Napolitano still owes her mother.**

_____

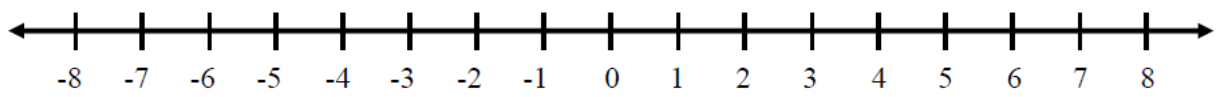
d) **Solve your answer on the number line below.**



Answer:_____

Model #2

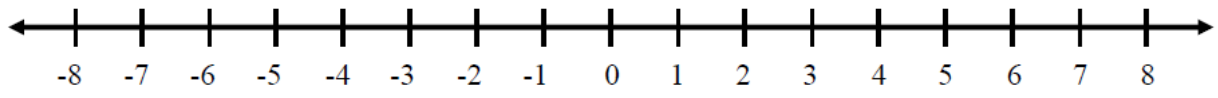
Use the number line below to determine the sum of 3 + 5



Answer: _____

Model #3

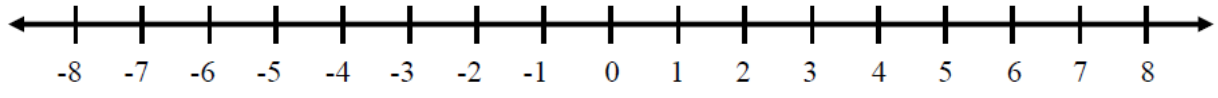
Use the number line below to determine the sum of -3 + 5.



Answer: _____

Model #4

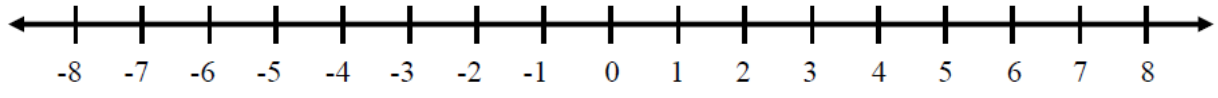
Use the number line below to determine the sum of -3 + (-5)



Answer: _____

Model #5

Use the number line below to determine the sum of 3 + (-5)



Answer: _____

Think-Pair-Share

Is there a rule that you can create that when you are determing the sum of different signs?

_____

_____

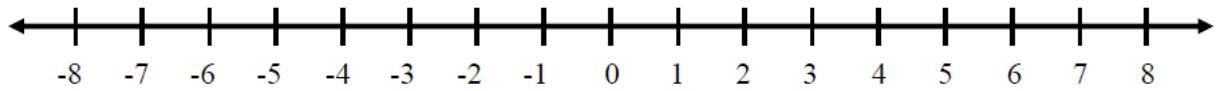
_____

"THE RULES..."

Same signs _____, different signs _____. Keep the _____ of the _____ digit then you will be exact!

Guided Practice #1

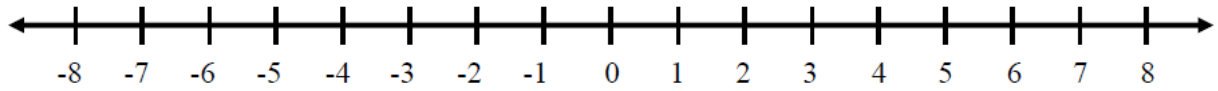
Use the number line below to determine the sum of -8 + 8



Answer: _____

Guided Practice #2

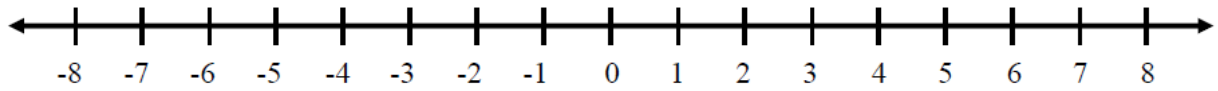
Use the number line below to determine the sum of -8 + 7



Answer: _____

Guided Practice #3

Use the number line below to determine the sum of 7 + (-8)



Answer: _____

Think-Pair-Share

1) **Why is the sum of -8 + 7 and 7+ (-8) the same? Justify your answer.**

_____

_____

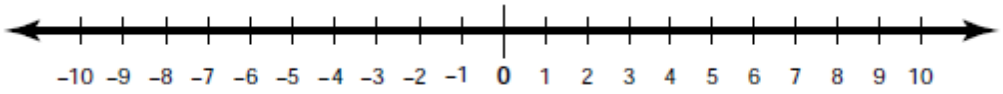
_____

_____

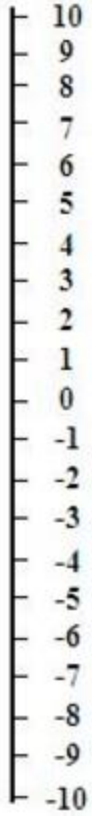
_____

Group Work

1) **Use the number line below to determine the sum of -10 + 12**



2) If a suba diver dives -9 feet below sea level and swims up five feet to see the dolphins, how many feet below sea level will the suba diver be when he swims up to see the dophins? Show your answer on the number line below.



3) **Use the number line below to determine the sum of -1 + (-5)**

Answer: _____

Name:_____ Date:_____

Ms. Napolitano Integers

Day 1 Level A

Directions: Represent the following situations as positive or negative integers.

1. you have $5 ____
2. you owe $6 ____
3. the temperature goes up 15 degrees ____
4. the temperature drops 4 degrees ____

Directions: For each addition sentences, show the addition sentence on the number line, and then add the numbers.

1. -7 + 6	2. 5 + (-8)
3. – 4 + –4	4. –2 + 9
5. 1 + 5	6. –1 + (–6)
7. –4 + 11	8. 8 + ⁻10
9. 7 + –4	10. –8 + 15

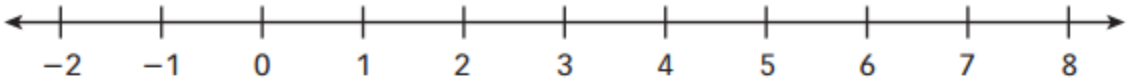
Name:_____ Date:_____

Ms. Napolitano Integers

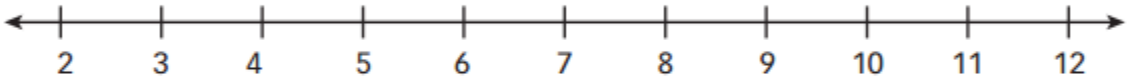
Day 1 Level B

Using a number line helps you to visualize what is happening when adding integers.

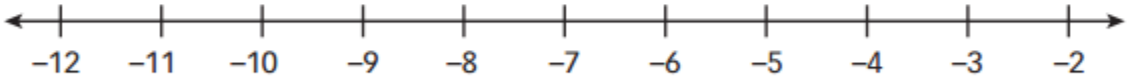
Use the number line below to show 6 + (−6). The sum 6 + (−6) = _____.



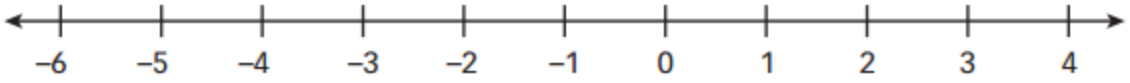
Use the number line below to show 11 + (−8). The sum 11 + (−8) = _____.



Use the number line below to show −4 + (−7). The sum −4 + (−7) = _____.

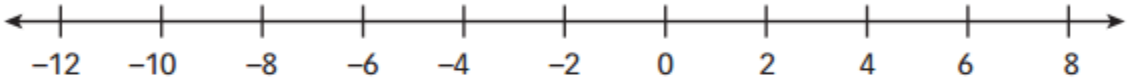


Use the number line below to show −4 + 7. The sum −4 + 7 = _____.



Jason's football team lost 6 yards from their starting position and then lost another 5 yards. What number represents a loss of 6 yards? a loss of 5 yards? _____

Use a number line to find the team's total loss.



On the next play, the team gains 12 yards. Will the team be at their original starting position? Explain.

_____

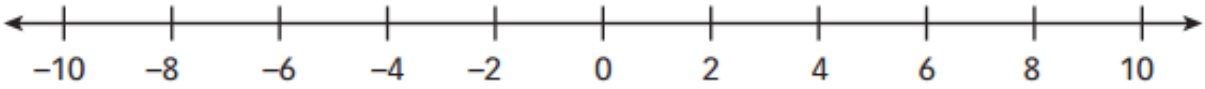
_____

A weather forecaster says the temperature will be about −5°C "give or take" 10 degrees.

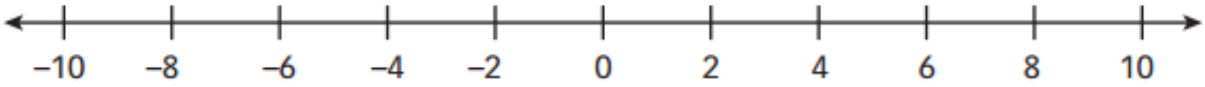
What is the greatest possible temperature? _____

What is the least possible temperature? _____

Compare: Show $7 + (-3)$ on the number line below.



Show $-3 + 7$ on the number line below.

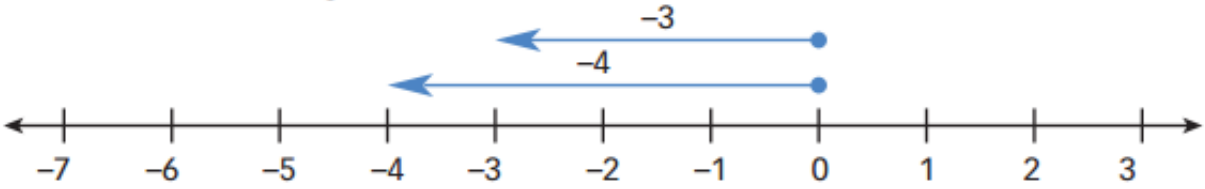


What do you notice about the results? _____

Explain why your number lines end on the same number.

_____

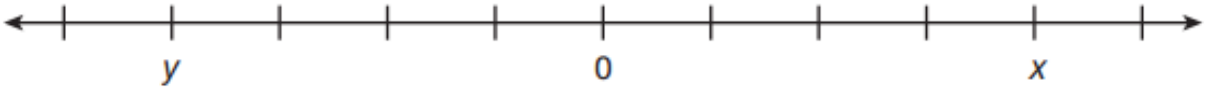
Explain: Chase drew the number line below to show $-4 + (-3)$. Is his model accurate? If not, tell what is wrong with his model.



_____

_____

Analyze: On the number line below, the numbers x and y are the same distance from 0. What is $x + y$? Explain how you found your answer.



_____

_____

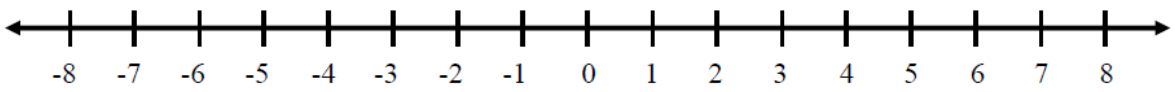
_____

Name:_____ Date:_____

Ms. Napolitano Integers

Day 1 Level C

Finding Sums of Integers



1. -7 + 6 =
2. 5 + -8 =
3. -4 + -4 =
4. -2 + 9 =
5. 1 + 5 =
6. -1 + -6 =
7. -4 + 11 =
8. 8 + -10 =
9. 7 + -4 =
10. -8 + 15 =

Challenge:

1. -5 + -9 =
2. 12 + -15 =
3. -10 + -4 =
4. 6 + 9 =
5. -14 + 20 =

Solve the problem. Use what you learned from the model.

You are designing a hike that starts at the top of a canyon, above sea level. You plan to stop at three locations:

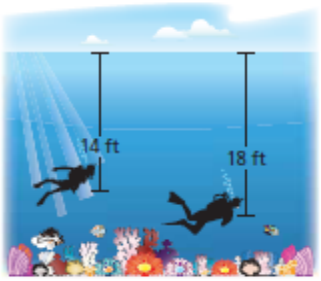
- a scenic landmark, which is at sea level
- a famous boulder, which is below sea level
- the bottom of the canyon, which is 600 feet below sea level

Design the hike. Choose the location of each stop. Make a table that shows each location, the change in elevation from the previous location, and the elevation of each location relative to sea level. Show how you found the elevation of each location using integer addition. Graph your locations on a number line. Describe your hike, including the total change in elevation from the start of the hike to the bottom of the canyon.

Did you . . .

- use integers?
- use a table and a number line?
- use an equation to model?
- use words to explain?
- answer the question?

Show your work. Use integers, tables, models, equations, and words to explain your answer.

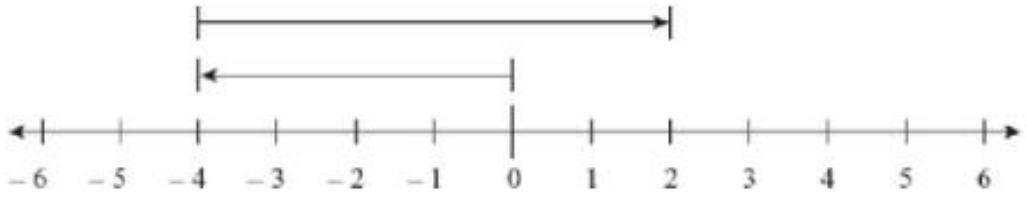
Questions	Answers
. **OPEN-ENDED** Write a negative integer whose absolute value is greater than 3.	
REASONING Determine whether $n \geq 0$ or $n \leq 0$. $n + \lvert -n \rvert = 2n$	
REASONING Determine whether $n \geq 0$ or $n \leq 0$. $n + \lvert -n \rvert = 0$	
 **41. CORAL REEF** The depths of two scuba divers exploring a living coral reef are shown. **a.** Write an integer for the position of each diver relative to sea level. **b.** Which integer in part (a) is greater? **c.** Which integer in part (a) has the greater absolute value? Compare this absolute value with the depth of that diver.	a) b) _____ is greater because _____ _____ c) Show your work below. _____ has a greater absolute value because _____ _____ _____ _____
. **VOLCANOES** The *summit elevation* of a volcano is the elevation of the top of the volcano relative to sea level. The summit elevation of the volcano Kilauea in Hawaii is 1277 meters. The summit elevation of the underwater volcano Loihi in the Pacific Ocean is −969 meters. Which summit is closer to sea level?	
SAVINGS You deposit $50 in your savings account. One week later, you withdraw $20. Write each amount as an integer.	

Name:_____ Date:_____

Ms. Napolitano Integers

Day 1 Exit Ticket

1. Corazon used the number line model shown below to help her write a true number sentence.



Which of the following could be Corazon's number sentence?

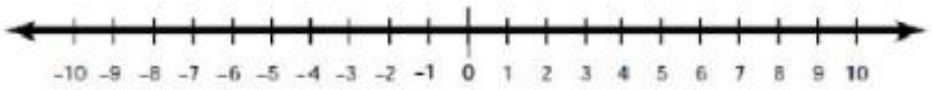
A. $-4 + 2 = 6$

B. $-4 + 6 = 2$

C. $2 + 6 = -4$

D. $2 + -4 = 6$

Use the number line below for questions 2 and 3.



2. $-6 + 10$

3. $5 + (-9)$

Name:_____ Date:_____

Ms. Napolitano Integers

Homework Day 1

Find the absolute value.

1. $|-1|$
2. $|-14|$
3. $|0|$
4. $|6|$

Complete the statement using <, >, or =.

5. $6 __ |-2|$
6. $-7 __ |-8|$
7. $|-9| __ 5$
8. $|-2| __ 2$

Order the values from least to greatest.

9. $4,\ |7|,\ -1,\ |-3|,\ -4$
10. $|2|,\ -3,\ |-5|,\ -1,\ 6$

11. You download 12 new songs to your MP3 player. Then you delete 5 old songs. Write each amount as an integer.

Use an integer strategy to find each answer.

(-2) + (+8) =	(+9) + (+7) =	(+7) + (-1) =
(+3) + (+1) =	(+7) + (+5) =	(-5) + (+9) =
(+2) + (-5) =	(-1) + (+3) =	(+8) + (+4) =
(-7) + (-2) =	(-6) + (-7) =	(+7) + (+8) =
(-4) + (+3) =	(-2) + (-6) =	(+9) + (-4) =
(+7) + (+3) =	(-5) + (-9) =	(-5) + (-6) =
(-9) + (-4) =	(-5) + (+4) =	(-3) + (-9) =
(-7) + (+1) =	(-1) + (-8) =	(-7) + (-4) =
(-1) + (+4) =	(+7) + (-4) =	(-6) + (+9) =

Name:_____ Date:_____

Ms. Napolitano Integers

Group Work Day 1_Level A

Directions: Determine the sum of each numerical expression by using the provided number line. Write your answers in the provided space below.

Numerical Expressions	Determine your answer using the number line below.	Write your final answer below.
6 + 4		
-6 + 4		
-6 + (-4)		
4 + (-6)		
-4 + (-6)		
4 + 6		

2) Which expressions have the value of -2?
_____ and _____

3) Which expressions have the value of 10?
_____ and _____

4) Which expressions have the value of -10?
_____ and _____

Name:_____ Date:_____

Ms. Napolitano Integers

Group Work Day 1_Level B

1) Directions: Determine the sum of each numerical expression by using the provided number line. Write your answers in the provided space below.

Numerical Expressions	Determine your answer using the number line below.	Write your final answer below.
6 + 4		
-6 + 4		
-6 + (-4)		
4 + (-6)		
-4 + (-6)		
4 + 6		

2) Determine the sum of the following examples below.

a) -12 + 15 = _____

b) -25 + 36 = _____

c) -18 + 18 = _____

d) 67 + (-32) = _____

e) 47 + (-19) = _____

f) -23 + (-17) = _____

g) 11 + (-11) = _____

Name:_____ Date:_____

Ms. Napolitano Integers

Group Work Day 1_Level C

1) Directions: Determine the sum of each numerical expression by using the provided number line. Write your answers in the provided space below. Then create a real world scenario that demonstrates the provided expression. The first real world scenario is completed for you.

Numerical Expressions	Determine your answer using the number line below.	Write your final answer below.	Real World Scenarios
-6 + 4			**Example: Ms. Napolitano asked her mother for $6 to get a subway sandwich. On Tuesday Ms. Napolitano gave her mother $4 back. How much money does Ms. Napolitano owe her mother?**
-7 + 8			
-9 + (-1)			
3 + (-10)			

h) Determine the sum of the following examples below. Then create a real world scenario for each example.

Determine the sum.	Create the real world scenario.
-12 + 15	
-25 + 36	
-18 + 18	
67 + (-32)	
47 + (-19)	
-23 + (-17)	
11 + (-11)	