Name_____ Date_____ Period_____

LESSON 7-1 · SESSION 1 · PRACTICE · FORM B

Integers and Opposites

Learning target – I can write an integer for a real situation and name its opposite. · 6.NS.C.5

REMEMBER

- Positive and negative numbers show **opposite directions** from 0. First decide what 0 means.
- Above, gain, and deposit are **positive**. Below, loss, and debt are **negative**.
- **Opposites** are the same distance from 0 on different sides. Zero is its own opposite.

WORKED EXAMPLE

A game score starts at 0. You earn 8 points, then you lose 8 points. Write each as an integer.

Step 1 0 means the starting score.

Step 2 Earn 8 points: 8. Lose 8 points: −8.

Step 3 Both are 8 units from 0, on opposite sides.

Answer **8 and −8 are opposites**

WORDS **integer** *(entero)* · **opposite** *(opuesto)* · **negative number** *(número negativo)*

PRACTICE

show your work · label units

1. Write an integer for each situation.

a. a rocket rises 17 meters ____

b. an unpaid bill of 32 dollars ____

c. 6 degrees below zero ____

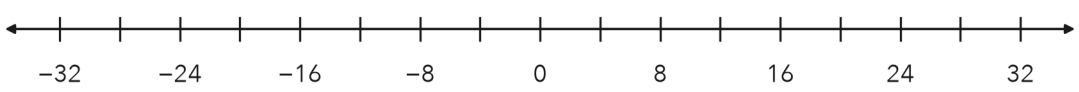
d. 4 floors below the street ____

2. Write the opposite of each number.

a. −23 ____ **b.** 9 ____ **c.** 0 ____

3. **Ocean Research Map.** A map lists four spots: Lookout 28 m above sea level, Reef 16 m below, Dock 12 m above, and Dive Station 28 m below.

Hint *Sea level is 0. Below sea level is negative.*



a. Write the integers: Lookout ___ Reef ___ Dock ___ Dive Station ___

b. Plot and label all four. Which two spots are opposites? _____

4. **Freezer Temperature.** A freezer is 15 degrees below zero. Write the integer. Then write its opposite.

Hint *Below zero means negative.*

Show your work.

Integer, opposite_____

5. **Lena's Claim.** Lena says the opposite of −21 is −21, because it already has a negative sign. Is she right?

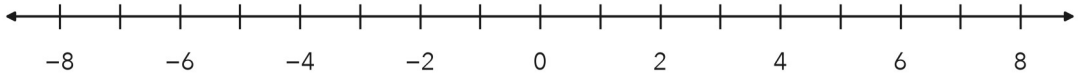
Hint *Opposites sit on different sides of 0.*

Show your work.

Opposite_____

6. **Golf Scores.** Three golfers finished at 5 under par, 5 over par, and even par. Write an integer for each. Plot them. Name the opposite pair.

Hint *Even par is 0. Under par is negative.*



Opposite pair_____

7. **Tower and Tunnel.** A water tower top is 44 feet above the ground. A tunnel bottom sits at the opposite elevation.

   a. Integer for the tunnel bottom: _____ ft

   b. What does 0 represent here? _____

8. **Elevator Trip.** An elevator starts at the lobby, marked 0. It goes down 5 floors, then up 8 floors.

   a. Write an integer for each move. _____

   b. Integer for the floor where it ends: _____

   c. What would the opposite of that floor mean? _____

Show your work.

FIND THE ERROR

explain the mistake, then fix it

9. **Darius's Work.** A cave floor sits 26 meters below sea level. Darius wrote the elevation as 26 and said its opposite is also 26. Explain his two mistakes. Then give the correct elevation and its opposite.

TEST PRACTICE

choose the best answer

10. A rise of 9 degrees is written as –

A –9 **B** 9 **C** 0 **D** –(9)

11. The opposite of –15 is –

A –15 **B** 0 **C** 15 **D** 1/15

SELF-CHECK CODE

find your answer · copy its letter into that problem's box · spell a math word

–21 Q	3 E	23 A	–32 E	–15 T	21 I	–6 G	17 N	–44 V	13 Z

#1a	#1b	#1c	#2a	#4	#5	#7a	#8b

CHECK YOURSELF ☐ I can do this on my own ☐ I need a little help ☐ I have a question about #___