LESSON MAKER PRO

Which Side of Zero?

Read, compare, and estimate positions on a number line.

GRADE 6 · 6.NOS.C.6

6.NOS.C.6 "Represent a rational number as a point on vertical or horizontal number lines. Represent points on a number line with negative numbers. Estimate quantities by reasoning about their location on a number line..."

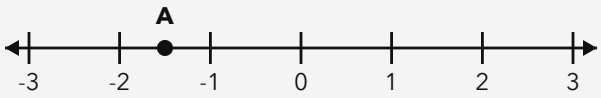
NAME _____ DATE _____

USE ZERO AND NEARBY TICKS

On a horizontal number line, numbers increase to the right. Opposites are the same distance from 0 on different sides. To estimate a value, compare its position with the nearest whole-number ticks.

WORKED EXAMPLE

What number is opposite point A?



1. A is halfway between -2 and -1.
2. A is -3/2.
3. The same distance right of 0 is 3/2.

Answer: 3/2

PRACTICE 4 problems

1 What is the opposite of -7/4?

ANSWER _____

2 Which whole number is -11/4 closest to?

ANSWER _____

3 Which whole-number tick is immediately left of -13/4?

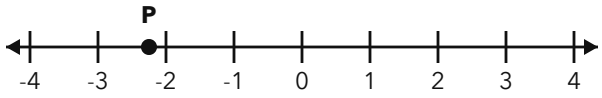
ANSWER _____

4 Round 17/6 to the nearest whole number.

ANSWER _____

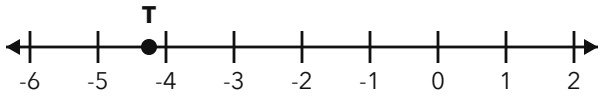
APPLY IT Show your work

1 Point P shows a diver's height in meters compared with the water's surface at 0. What signed height is the same distance above the surface?



ANSWER _____

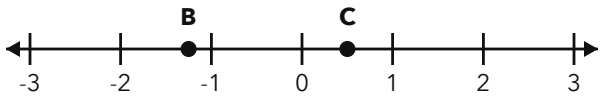
2 A weather app marks the outdoor temperature at T, in degrees Celsius. Round it to the nearest whole degree.



ANSWER _____

CHALLENGE One step up

Point D is opposite B. Is D left or right of C, and how far apart are D and C?



WORK SPACE AND ANSWER

ANSWER KEY

Which Side of Zero?

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	What is the opposite of -7/4?	**7/4**
2	Which whole number is -11/4 closest to?	**-3**
3	Which whole-number tick is immediately left of -13/4?	**-4**
4	Round 17/6 to the nearest whole number.	**3**

PART 2 · APPLY IT

1. **9/4 meters** P is at -9/4 meters. Its opposite is 9/4 meters.
2. **-4°C** T is at -4.25°C, which is closer to -4°C than to -5°C.

CHALLENGE

D is right of C; they are 3/4 unit apart.

Accept equivalent fractions or decimals. In the challenge, D is at 5/4 and C is at 1/2, so their distance is 3/4.