LESSON MAKER PRO

Across Zero

Find opposites on a number line.

GRADE 6 · 6.NS.C.10.a

6.NS.C.10.a "Define opposites as numbers located on opposite sides of 0 and the same distance from 0 on a number line."

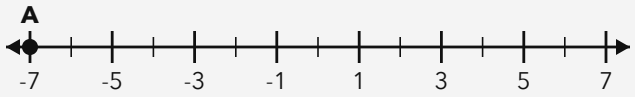
NAME _____ DATE _____

THE BIG IDEA

Opposites are on different sides of 0, the same distance from 0. To find an opposite, keep the distance and switch sides.

WORKED EXAMPLE

Point A is shown on the number line. What number is opposite A?

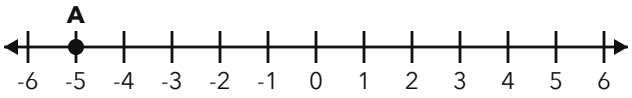


1. A is at -7, which is 7 units left of 0.
2. Move 7 units right of 0 to reach the same distance on the other side.
3. That number is 7.

Answer: 7

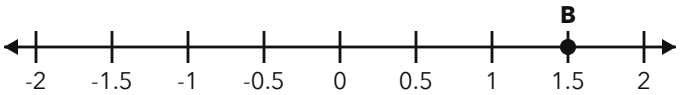
PRACTICE 6 problems

1 What number is opposite point A?



ANSWER _____

2 What number is opposite point B?

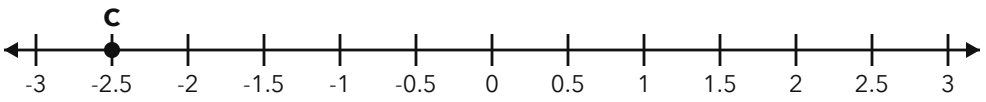


ANSWER _____

3 What number is opposite -3/4?

ANSWER _____

4 What number is opposite point C?



ANSWER _____

5 What number is opposite 4?

ANSWER _____

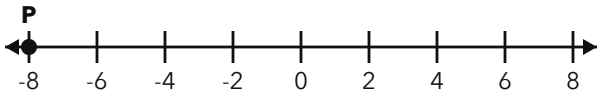
6 Are -2/3 and 2/3 opposites? Explain using 0.

ANSWER _____

_____

APPLY IT Show your work

1 In a video game, point P shows a change in your score. What score change would cancel it out?



ANSWER _____

2 An underwater drone is 12 meters below sea level. A camera drone is the same distance above sea level. What is the camera drone's height compared with sea level?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Does 0 have an opposite? Explain how your answer fits the distance rule.

WORK SPACE AND ANSWER

Across Zero

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	What number is opposite point A?	**5**
2	What number is opposite point B?	**-1.5**
3	What number is opposite -3/4?	**3/4**
4	What number is opposite point C?	**2.5**
5	What number is opposite 4?	**-4**
6	Are -2/3 and 2/3 opposites? Explain using 0.	**Yes. They are on opposite sides of 0, and each is 2/3 unit from 0.**

PART 2 · APPLY IT

1. **+8 points** P shows a change of -8 points. The opposite change is +8 points, which cancels it out.
2. **12 meters above sea level** The underwater drone is at -12 meters. The opposite position is +12 meters, or 12 meters above sea level.

CHALLENGE

Yes. The opposite of 0 is 0. It is 0 units from 0, so there is no different number the same distance away.

Accept answers with or without a plus sign for positive numbers. For explanations, look for equal distances from 0 on opposite sides, except that 0 is its own opposite.