# Answers and talk notes

Explore Integers and Their Opposites

### What your student is learning

Tonight we use integers — positive and negative whole numbers — to describe real situations, say what 0 means in each one, and name a number's opposite.

## Answers

Ask your student to explain before you look.

1. **B.** −8. Below zero is negative, so 8 degrees below zero is −8.
2. **A.** −6. The opposite of 6 is −6. Both are 6 units from 0.
3. **D.** 20. Money coming in is a gain, so the change is 20.
4. **B.** Sea level. Sea level is 0. The submarine is 30 meters below it.
5. **C.** 15. The opposite of −15 is 15. Both are 15 units from 0.
6. **C.** −7. Left of 0 is negative, so the point is −7.

### Talk about it

What does 0 mean in this story? Which side of 0 is the number on, and what is its opposite?

### Home mission

Say the kitchen floor is sea level, 0. The pantry is 3 steps below it. Can your student say the integer, then its opposite?

### When they are stuck, ask

- What does 0 stand for in this story? Start there.
- Is this amount above 0 or below 0? That decides the sign.
- How many units from 0 is it? Jump that same distance the other way to find the opposite.

### Try not to say

- The negative sign just means the number is small.
- Below sea level and above sea level can both be written as positive numbers.
- The opposite of −9 is still −9.