2.1b Class Activity: Add Integers Using a Number Line
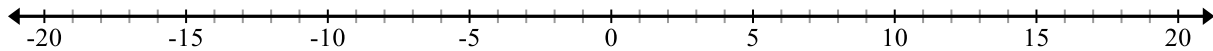
Explore:
Answer each of the following questions. Using pictures and words, explain how you arrived at your answer.

1. An osprey flies off the ground and reaches 35 feet above a river when he sees a trout. He then dives 37 feet down to get the trout. How many feet below the water does he end up?

2. Zach's football team moves the football 35 yards forward on the first down. On the next down, they lose 12 yards. On the down after that they go forward 8 yards. How many yards from the starting point did they move the football in the three down?

3. You walk 3 miles from your house to the store. At the store you meet up with a friend and walk with her 1 mile back towards your house. How far are you from your house now?

4. You ride your bike 12 miles and then get a flat tire! You turn around and walk the bike 4 miles before you mom is able to pick you up. How far are you from the house when your mom picks you up?
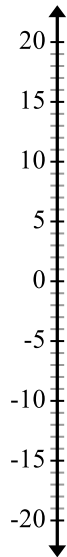
Review:

Place each of the following integers on the number line below. Label each point:

5. **A** = 4   **B** = –4   **C** = –15   **D** = 7   **E** = 18   **F** = –19

6. **A** = –20   **B** = –17   **C** = 7   **D** = 13   **E** = –6   **F** = 19

7. How did you locate 7 on the number line?

8. How did you locate –15 on the number line?

9. In general, how do you locate a positive or negative number on a number line?

10. Brainstorm similarities and differences between a chip model and number line model for representing integers.