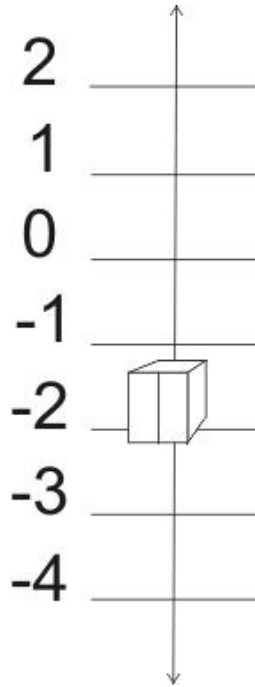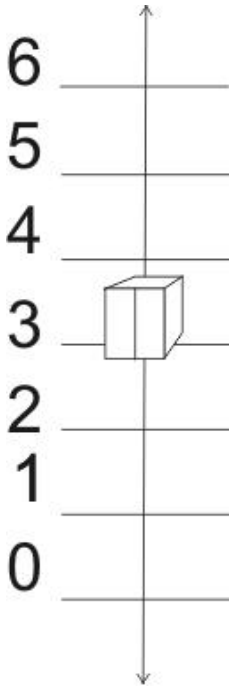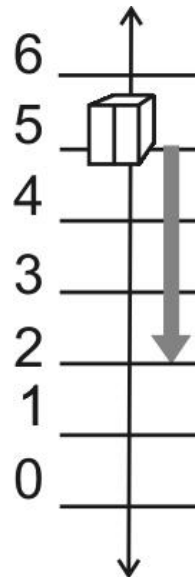# Elevator Arithmetic

What integer is represented by the elevator in the following position?

- Suppose you are on the second floor and you go up three levels. What floor are you on?
- Suppose you are on the fifth floor and you do down two levels. What floor are you on?

How can you model this using your elevator? How can you represent this using symbols?
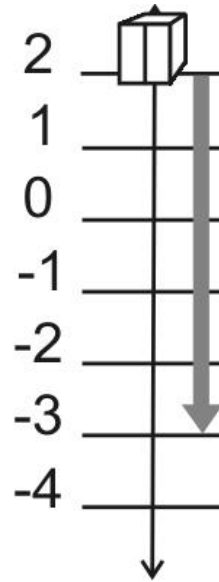
$$5 - 3$$

$$2$$

- Suppose you are on the second floor and you go down five levels. What floor are you on? How is this different than the first two examples?

How can you model this using your elevator? How can you represent this using symbols?

$$2 - 5$$

$$-3$$

2
1
0
-1
-2
-3
-4

1. Suppose you start 5 floors underground and you take the elevator up 8 floors. Where are you?

Symbolic: _____

2. If you start 6 floors underground and you take the elevator up 4 floors, where are you?

Symbolic: _____

3. If you start 3 floors underground and you take the elevator down 5 floors, where are you?

Symbolic: _____

How would you interpret the following expressions to decide where to start and where to end up?

$$5 - 8 \qquad -9 + 3$$