

2-2 Enrichment***Elevator Puzzle***

José gets on the elevator and rides without pushing any buttons. First, the elevator goes up 4 floors where Bob gets on. Bob goes down 6 floors and gets off. At that same floor Florence gets on and goes up one floor before getting off. The elevator then moves down 8 floors to pick up the Hartt family who ride down 3 floors and get off. Then the elevator goes up one floor, picks up Kris, and goes down 6 floors to the street level where José exits the elevator.

1. Suppose x is your starting point. Write an equation that represents José's elevator ride.

2. At what floor did José get on the elevator?

Now that you know the starting point of José, the starting point of every other person who rode the elevator can be determined.

3. At what floor did Bob get on the elevator? At what floor did Bob get off?

4. At what floor did Florence get on the elevator? At what floor did Florence get off?

5. At what floor did the Hartt family get on the elevator? At what floor did the Hartt family get off?

6. At what floor did Kris get on the elevator? At what floor did Kris get off?