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Work Backwards

Here's How

Locate the facts and the question.

- ▶ Alex gets on an elevator. He goes down two floors. Then he goes up four floors and gets off. Alex got off on the fifth floor. On what floor did Alex get on the elevator?



Understand what the question is asking.

- ▶ The question asks you to find the floor on which Alex got on the elevator.

Decide what to do.

- ▶ Some problems require you to start at the end and work backwards.

Solve the problem.

- ▶ Start at the end. 5th floor
Go down 4 floors. $5 - 4 = 1$ 1st floor
Go up 2 floors $1 + 2 = 3$ 3rd floor

Answer the question.

- ▶ Alex got on the elevator on the third floor.

Try This

Solve the word problem.

- Mary and Martha are climbing a mountain. On the first day, they climb 1250 meters. On the second day, they climb 1445 meters and reach the top. The top of the mountain is 3892 meters above sea level. How far above sea level were Mary and Martha on the first day?

Start at the end and work backwards.

$$\begin{array}{r} 3892 \\ -1445 \\ \hline \end{array}$$

Answer the question.

- ▶ _____ meters

Go Ahead**TIP**

Sometimes you must work backwards to find the answer.

Solve each word problem.

1. Chelsea is manager of a hotel. She gets on the elevator and goes down 12 floors. Then she goes up 18 floors. Then she goes down 21 floors and gets off on the 1st floor. What floor did Chelsea get on the elevator?

2. Mark goes shopping with his sister Felecia. Mark buys a book for \$4.95. He buys lunch for \$3.28. Then he spends \$1.00 to take a bus back home. He has \$5.82 left. How much money did Mark start out with?

3. Felecia buys a tape cassette for \$6.95. She spends \$2.82 for lunch and \$1.00 for ice cream. She has \$6.58 left. How much money did Felecia start out with?

4. The school drama club presents their play on Friday and Saturday nights. 256 people attended the play on Saturday night. 535 people attended the play altogether. How many people attended on Friday night?

5. A group of students spent 5 days selling tickets to the school play. They sold 148 tickets on Monday, 95 on Wednesday, 57 on Thursday, and 95 on Friday. They sold 498 tickets in all. How many did they sell on Tuesday?

