## Solve Real-World and Mathematical Problems - Step-by-Step Lesson

## Lesson 1

The librarian puts books on a shelf. The shelf can hold 130 books. The shelf has 50 books already. How many more books can the librarian add to the shelf to fill it?

## **Explanation**:

Step 1) First see what is being asked.

Step 2) To solve the real world problems both sides of an equation are equal. To maintain their equality whatever operation is performed on one side of the equation must be done to the other side. Use substitution to determine if both sides of the equation are equal.

Step 3) Now we have to make the equation and then solve it.

Let a = Books that the librarian put to the shelf

The number of books the shelf already has = 50

Total books that the shelf can hold = 130

The equation will be:

50 + a = 130

Remove 50 from both sides of the equation, which keeps the equation balanced. So:

a = 80

80 books will make the shelf full.



