

Word Problems

Let's move onto another type of problem: a problem with lots of words and numbers. You may not know where to start, and that's okay. Modeling can help you!

Suppose you are given the following word problem:

Zoe and Meg really like basketball. Meg has 8 basketballs, and Zoe has 5 basketballs. How many basketballs do they have total?



We want to solve this problem by modeling it. Let's see how someone might think about this problem.

1)

First I need to read the whole problem. Do I understand all parts of the problem?

2)

What am I asked to find?
I am asked to find the number of basketballs they have total. Let's define a variable.

Workspace

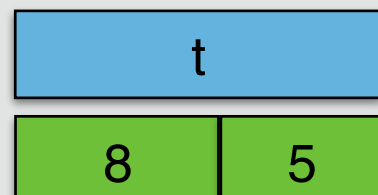
t = total number of basketballs

3)

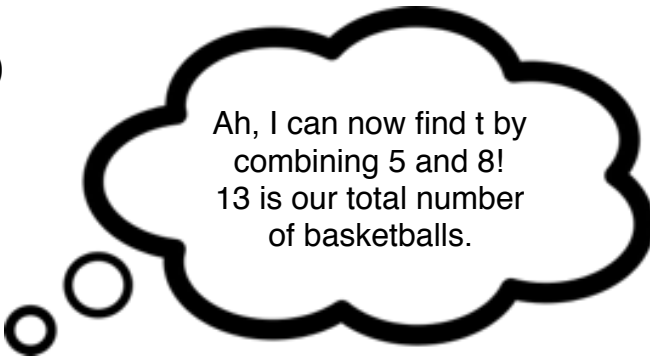
I don't know what t is, but I do know Zoe's basketballs added to Meg's basketballs equals t .

Workspace

t = total number of basketballs



4)

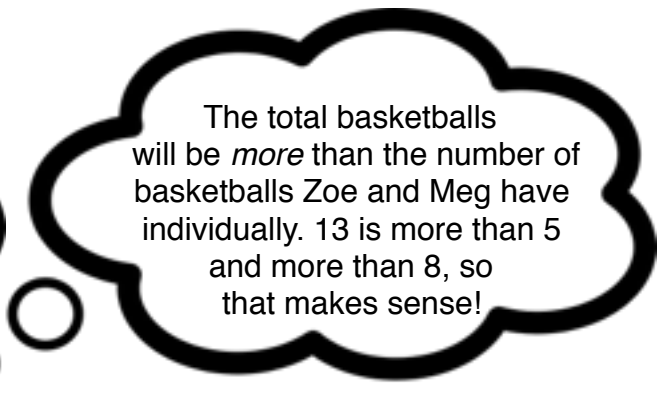
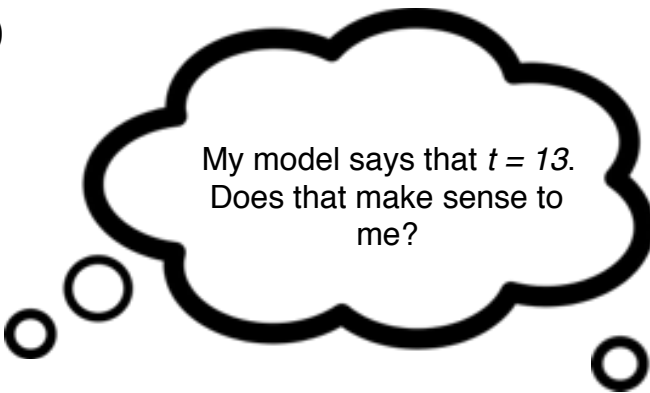


Workspace

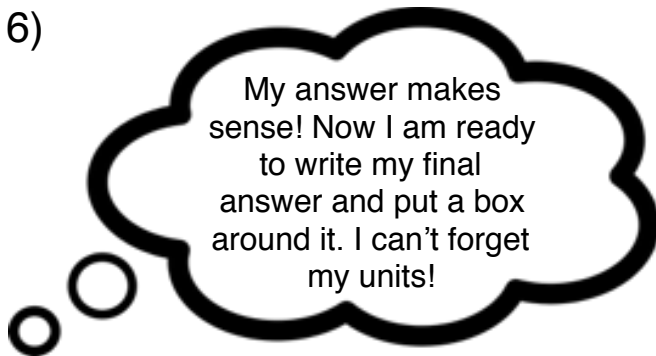
t = total number of basketballs

t
13

5)



6)



Workspace

t = total number of basketballs

t
13
13 Basketballs

What steps did this student go through to solve this problem?

1. **Read** the entire problem and make sure you understand the situation.
2. **Define**: Decide what you're trying to find and define a variable.
3. **Draw** the model for the situation. You will need to decide what parts are equal.
4. **Solve**: Use the model and your tools of addition, subtraction, multiplication, and division to solve the problem.
5. **Check** if your answer makes sense. If it does not, go back and find your mistake.
6. **Write** and box your answer. Don't forget the units!