Booked in

Annotation

Ariana can write an equality statement for a situation involving factors and including one unknown. She is able to explain the conventional algebraic notation she uses.

Problem: Booked in

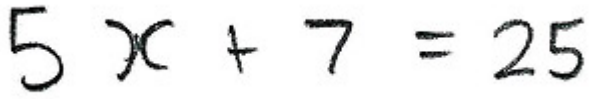
The teacher shows the student the following problem, reading it to them as required:

There are five identical books the same thickness and one other book that is 7 centimetres thick. The books fit exactly on a bookshelf that is 25 centimetres across. How thick is each of the five identical books?

Then the teacher asks the student:

Before doing any calculations to find the thickness of the books, can you write an equation that describes the situation, using x for the thickness of each identical book?

Student Response



Teacher:	Tell me about what you have written.
Ariana:	If x is the thickness of each identical book, then five times x, or 5x for short, is the thickness of the five books. Seven is the thickness of the other book. So 5x + 7 = 25. Now I can easily work out the size of each book.