Sheep legs

Annotation

Matiu solves the multiplication problem by using repeated addition with each 4 in his equations representing the legs on one sheep. Matiu solves the division problem by continuing to use his repeated addition strategy. He makes the connection between the number of legs, the number of sheep and his knowledge of the pattern of 4s.

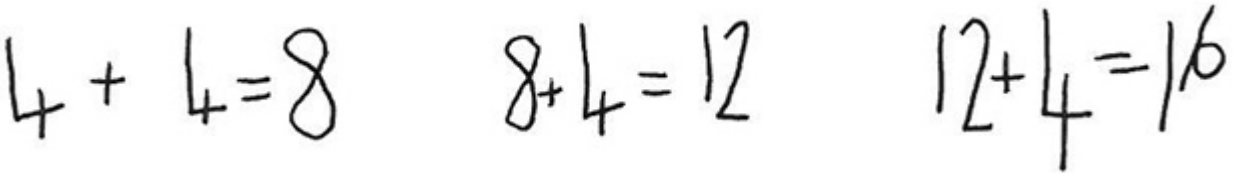
Problem: Sheep legs

The teacher shows this problem to the student and reads it with him as required:

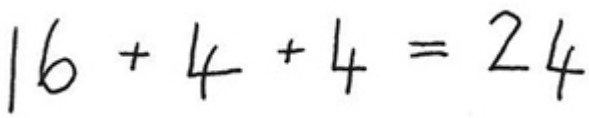
How many legs do 4 sheep have altogether?

Student response

Matiu:	It's sixteen.
Teacher:	Tell me how you did that.
Matiu:	I started with those two sheep — that's 4 + 4 — which makes 8 legs. I added the next sheep's legs — another 4 — that makes twelve. Then I added on the four legs of the last sheep — which made 12 + 4 and that is 16. I wrote it down like this.



Teacher:	What do you know that helped you?
Matiu:	I can add fours easily.
Teacher:	What if there were 24 legs, how many sheep would there be?



Matiu:	That's 6 sheep.
Teacher:	Tell me how you did that.
Matiu:	4 sheep have got 16 legs and another 4 will be 20 and another 4 will be 24, so that's 6 sheep.
Teacher:	What do you know that helped you?
Matiu:	I know how to add on four to a number.
Teacher:	Tell me why you did it that way.

Matiu: I already did the first one so I started with 16 legs for 4 sheep and added 2 more sheep to get to 24 legs.