

Trees in the forest

Annotation

Andrew solves the problem using a known multiplication fact. He recognizes that a problem with sets or groups the same size is multiplication and quickly solves this single step problem. He knows that 8×5 gives the same answer as 5×8 (the commutative property of multiplication).

Problem: Trees in the forest

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

Here is a forest of trees. There are 5 trees in each row, and there are 8 rows.

How many trees are there in the forest altogether?



Student response

Andrew: There are 40 trees.

Teacher: Tell me how you worked out the answer.

Andrew: I used my tables, $5 \times 8 = 40$.

Teacher: What do you know that helped you?

Andrew: I know that the groups are the same size, so with the trees in rows of five, it's 8 groups of 5. To find the answer you can work out 8×5 or 5×8 because they give the same answer.