

Scoring points

Annotation

Michael is able to partition numbers into smaller parts to make addition easier and he recognises the convenience of using tidy numbers. He knows that he has to add all the numbers together and that he can change the order of addends without changing the sum (the commutative property). He also recognises that he can apply his knowledge of pairs of numbers that add to 10. He demonstrates his thinking by recording an addition equation, although it is technically incorrect.

Problem: Scoring points

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

Our team scored 6 points in the first game, and we scored 15 in the second game. But we scored only 4 in the last game. How many points did we score altogether?

Student response

Michael: It's 25.

Teacher: Tell me how you did that.

Michael: I know that I have to add all of these together. I'll start with 15 and 6. 15 and 5 makes 20. Another 1 is 21. 4 more is 25.

Teacher: What do you know that helped you?

Michael: I know that 6 is 5 and 1. I know that adding to 20 is easy.

Teacher: Tell me why you did it that way.

Michael: Oh... I could have done it just by making 10 from the 6 and 4 and adding that onto the 15. That would have been easier.

Teacher: How would you record that?

Michael: Well I reckon the easiest way is to just write what I just did which was 15 plus 10 more, so kind of like this.

$$15 + 6 + 4 = 10 = 25$$