Sharing time

Annotation

Michael recognizes that he can use his knowledge of both multiplication facts, and minutes in an hour, to solve this division problem. He is able to partition and recombine numbers and explain a multiplication solution that includes a place value partition of the multiplier.

Problem: Sharing time

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

Tim's group is on the class computer for the next hour. There are 5 people in the group and they decide each person should have the same amount of time. How many minutes do they each get on the computer?

Student response

Michael:	Everyone gets 12 minutes each.
Teacher:	Tell me how you did that.
Michael:	Well there's 60 minutes in 1 hour. If each person gets 10 minutes each that is 5 x 10, which is like 50 minutes. That leaves 10 minutes, which can be shared with the 5 people by giving them another 2 minutes each. So it's 10 + 2, which is 12 minutes each.
Teacher:	What do you know that helped you?
Michael:	Well I know the number of minutes in an hour and I know 5 x 10 and 5 x 2 and that I can add them together at the end like I did. Actually that's really like 'timesing' 5 by 12 because 12 is *that* 10 and *that* 2. (Michael indicates the numbers).