

Parking cars

Annotation

Mari uses her knowledge of doubles to solve this problem, recognizing that this is a more efficient strategy than counting.

Problem: Parking cars

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

There are some cars in the car park. Another 8 cars come in and now there are 14 altogether. How many cars were in the park to begin with?

Student response

Mari: Six.

Teacher: Tell me how you did that.

Mari: Well I used my doubles. I know $7 + 7 = 14$ so it's like one up and one down. Because that's 8, which is one up from 7, the answer has to be 6 because that is one down from 7.

Teacher: What do you know that helped you?

Mari: Well I actually know $8 + 8 = 16$ too so I could check it that way. 14 is 2 less than 16 and 2 less than 8 is 6. So it's 6 that way too.

Teacher: Tell me why you did it that way.

Mari: Because doubles are quick. You don't have to count.

Teacher: How would you record that?

Mari: Well I'd just write $6 + 8 = 14$ because it shows that 6 is what we had to start with. And that was what the question was.

$$6 + 8 = 14$$