

Minibuses

Annotation:

Aaliyah can write a multiplicative equality statement of a situation involving an unknown and can explain her reasoning for the notation she uses. She recognises that she would be able to solve the unknown by using an inverse operation.

Problem: Minibuses

The teacher shows the student the following problem, reading it to them as required:

The school used six minibuses to take them on an outing. The minibuses each carry the same number of passengers. There were 102 people at school that day. How many passengers were in each minibus?

Then the teacher asks:

Before doing any calculations to find the number of passengers on each minibus, can you write an equation that describes the situation?

Student Response

$$102 \div 6 = \square$$

Teacher: Tell me about what you have written.

Aaliyah: That's how I'd work it out. I'd divide 102 by 6.

Teacher: Can you write an equation that uses a multiplication sign to describe the situation?

$$6 \times \square = 102$$

Teacher: Tell me about what you have written this time.

There were six buses with the same number of people in each, but we don't know how

Aaliyah: many that is. I've used an empty box to show that we don't know that number. But 102 is what we'd get if we did know and if we multiplied the two numbers together.