Triple x

Annotation

Poppy can solve problems that use the algebraic convention of letter symbols and can explain her understanding of the given notation. She recognises that *x* can only represent a single-number value within an equation.

Problem: Triple *x*

The teacher places the following problem on a card in front of the student, reading it to them as required, and asks the student to solve the problem:

> Hine has the following problem to solve:
>
> "Find the value (s) for *x* in the expression $x + x + x = 72$"
>
> Hine gives 3 answers:
>
> 1. 36, 18, 18
> 2. 60, 6, 6
> 3. 24, 24, 24
>
> *Which of Hine's answers is (are) correct? (Note that you may give more than one answer.)*

Student Response

Poppy:	3
Teacher:	Tell me why you think that.
Poppy:	It's true that they all add up to 72, but in answers 1 and 2, there are different number values. Because *x* is being used three times, each time in this equation, *x* should have the same value. So it has to be 24, 24, 24.