

TIMSS Video – Hong Kong - <http://timssvideo.com/65>

Identities (NB10311008)

Time Caption

00:03:14 For the first one, you found that the solution is X equals two. What does it mean? X equals two.

00:03:24 If I say that X equals two is the solution, what does it mean? What does it mean?

00:03:37 It means, when X equals two, left-hand side will equal right-hand side. Let's check it.

00:03:49 Okay, when X equals two, what is the left-hand side? It is two X plus four, okay? Two X plus four.

00:03:59 Two, X , plus four, what's the result?

00:04:07 Eight. Eight.

00:04:08 Eight. All right? And for the right-hand side, it is X plus six. X , we found that X equals two.

00:04:25 Therefore, it is eight again. Are they the same?

00:04:29 Yes. Okay? X equals two, then left-hand side right- equals right-hand side. That is the solution for equation one.

00:04:30 Yes.

00:04:39 How about the others? Lau Wai Fung, give me one more number for X , other than two. Any one?

00:04:54 Try to use [In Chinese] three [In English].

00:04:55 Three. Okay. Let's substitute X equals three. Okay? In equation one. Another value for X .

00:05:09 The left-hand side, two X plus four. This time, X equals three. What's the value for the left-hand side?

00:05:22 Ten.

00:05:23 You will find that it is 10. But for the right-hand side, X plus six, X plus six.

00:05:34 Nine.

00:05:35 Nine. All right? They are not equal. Therefore, we will not say that X equals three is a solution. The solution is X equals two.

00:05:49 All right? Of course, you can test for the others. Okay, how about equation two, I get zero equals zero, what does it mean?

00:06:01 Do you think that there is no solution? There is no solution. Any one of you say that there is no solution?

Time Caption

00:06:11 I can't find X, therefore, no solution. No? Then what will be the solution?

00:06:18 Anything.

00:06:20 Sorry? Anything. What do you mean by anything?

00:06:24 Any number.

00:06:26 Any number. Okay. Let's check it. We have two and three, okay?

00:06:32 Let's try this two firstly. When X equals two. Left-hand side, right-hand side.

00:06:47 I try to compare these two when X equals two. Left-hand side is two X plus 10. Two X plus 10. Answer?

00:06:59 Fourteen.

00:07:03 Fourteen. Right-hand side? Two X plus five. Two plus five. It is?

00:07:14 Fourteen.

00:07:15 Fourteen again. Seven times two. Are the two sides equal?

00:07:22 Yes.

00:07:23 Yes. Left-hand side equals right-hand side, therefore, even if I can't find the solution, in fact, two, itself, is one of the solutions.

00:07:32 How about three? When X equals three. Of course, both the left-hand side and right-hand side, the values will be changed. Okay?

00:07:49 On the left-hand side, it is two X plus 10. And on the right-hand side, it is two X plus five. For the left-hand side, it is?

00:08:05 Sixteen.

00:08:06 Sixteen. Six plus 10. But for the right-hand side?

00:08:12 Sixteen.

00:08:13 It is also 16. This time it is two times eight, is it equal?

00:08:19 Yes.

00:08:20 Yes, the left-hand side is still equal to the right-hand side. Not no solution, in fact, at least we have found two. Okay?

00:08:31 More than one. How many? From the book, you still have three trials, try to test whether these three are the solutions or not.