

Elementary school Math

Problems related to quantity

We are learning to run and jump in physical education.

It is said that the high jump record is related to height and the 50m running record.

By using the following equation, you can find out how many cm is the target height for jumping.

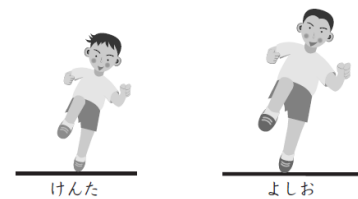
Formula for finding the target height (cm) for running high jump

Add 120 to half of your height (cm) and subtract 10 times from the record (seconds) of the 50m run.

$$(\text{Height} \div 2) + 120 - (\text{50m run record} \times 10)$$

The height and 50-meter running records of Kenta and Yoshio are as follows.

	Height (c m)	50-meter running record (in seconds)
Kenta	1 4 0	8 . 0
Yoshio	1 6 0	8 . 0



- (1) Kenta used the above equation to calculate and find the height he was aiming for.
When I actually jumped in the high jump, the record was 115 cm. What would you say when you compare this record with Kenta's target height?

Choose the correct one from 1 to 3 below and write its number.

- 1 The record is exactly the same as the height you are aiming for.
- 2 The record is higher than the target height.
- 3 The record is less than the target height.

(2) Yoshio is also trying to find his target height by calculating it using the formula above. Kenta looked at the height of Kenta and Yoshio and their 50m running record, and said the following.
You don't need to do any calculations to know that Yoshio's goal will be higher than mine.

Why did Kenta say, "You don't need to do the calculation to know that it will get higher"?



Let's write about it using words and equations.

Reason: