



CHECK MY WORK

Check My Work is a strategy that students use to ensure that they have solved a given problem accurately and labeled everything correctly. It's taking a second look at the work they have completed, sometimes choosing to check their method for solving by using a different strategy.

This is an important strategy, because for students to understand math deeply, they must be able to

- calculate accurately and efficiently,
- be flexible in their thinking about math (that is, have more than one method for solving a given problem),
- explain their work to others, and
- reason abstractly and concretely.

Having the ability to look back at the work they have done, while looking for any mistakes they might have made, provides students the opportunity to build on the skills listed above.

As students look at their work, they can ask themselves these questions:

- Did I express the problem accurately? (Do my numbers and symbols in the equation make sense?)
- Did I answer what the problem is asking me to solve?
- Could I explain how I solved this problem to a friend?
- Did I label all of my work? Are my labels consistent?
- Would someone be able to follow my method for solving if I was not there to explain?

Consider this example:

Look at the problem and the solution that follows. Check the work to make sure that it makes sense and that labels are accurate.

Hannah's last 5 times of running the 50m dash are as follows: 10 seconds, 13 seconds, 13 seconds, 14 seconds, 10 seconds. What is her average for running the 50m dash?

Method

- *Reorder the times from smallest to greatest. 10, 10, 13, 13, 14.*
- *Then, find the number that is in the middle.*
- *In this case, it is 13.*

Solution

Hannah's average is 13.

Think-Aloud of Check My Work Strategy

I am going to check this work by rereading the problem and then looking at how it was solved. When I read the problem, I know that I will be finding the average. That means that I need to add up all of Hannah's running times and then divide by the total number of times given.

I see that there is an error in the method and solution because I did not do this. Instead, I found the median (middle time) by ordering her times from smallest to largest. I also see that I forgot to label the final solution using seconds as the unit of measure.

To fix this mistake, I need to instead do the following:

Add up all of Hannah's times: $10 + 13 + 13 + 14 + 10 = 60$

Divide that total by the number of times given: $60 \div 5 = 12$

Solution: Hannah's average is 12 seconds

By rereading the problem and looking over the method for solving, I was able to recognize the errors I made when calculating and fix them. I was also able to label the work correctly.

How You Can Help Your Child with This Strategy at Home

1. Ask your child to share their completed math homework with you. Look over their work and ask them to explain how they solved one or two of the problems. If you detect any errors, ask your child to explain how they found the solution, and see if they recognize where the mistake was made. If they don't, help them understand the mistake and work together to fix it.
2. Model a problem for your child. After solving, model how you go back over your completed work to ensure that you have solved the problem accurately. If you've made a mistake, model how you correct the error.