

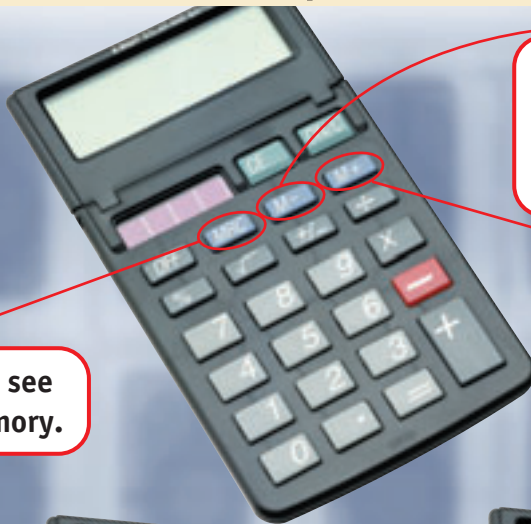
Memory Testing

You need a calculator

a classmate

Activity

Most simple calculators have three memory buttons as shown here. Check with your teacher if your calculator has different buttons.



M-

One press subtracts the number in the window from whatever is in the memory.

M+

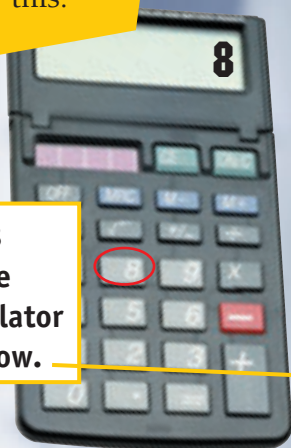
One press adds the number in the window to whatever is in the memory.

MRC

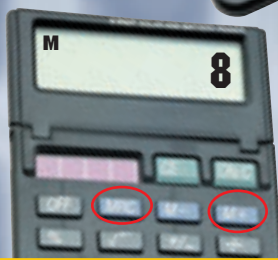
One press lets you see what is in the memory.



Try this:



Put 8 in the calculator window.



a. Press M+ three times.
What do you think is in the memory? Why?
Press MRC once to find out.



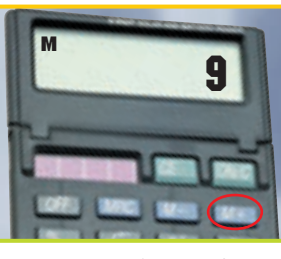
b. Press MRC again to clear the memory and remove the M from the window.
What do you think the M stands for?



Now try this:



Put 9 in the calculator window.



Press M+ three times.



Press M- three times.

What do you think is in the memory? Why?
Press MRC to find out if you are right.



Game

Use what you know about the memory keys to play Read My Memory with a classmate. Start with nothing in the memory and with 0 showing in the window. One player puts a single-digit number in the window of the calculator.

While the other player watches, the first player slowly presses the M+ and M- buttons up to 10 times.

For example, Sarah watches John press

7

M+ M+ M+
M- M+ M+
M-

The player who has done the pressing says: "Read my memory!"

Read my memory!

I think it's 21 ...
Yes, it is!

The other player predicts what number is in the memory and then checks by pressing MRC.

Both players have 10 turns each, and the person who gets the most answers correct wins.

Once you get very good at the game, try these ideas to make the game more challenging:

- Start with a two-digit number in the window and use up to 10 memory key presses.
- Start with a two-digit number in the window. The other player gives you a target to reach. Stop when you think you have reached the target. Press MRC to check.
- One player secretly puts a number other than 0 in the memory (for example, 42), hides this number by putting in a single-digit number, and then does up to 10 memory pushes. The other player presses MRC and then predicts what the mystery number is.