

Name (in HUGE LETTERS): _____
(lastname, firstname)

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1. What instruction is used to return from a function call?

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2. What does the following instruction do:

lw \$t0, 45(\$s0)

loads value from address location (\$s0+45) and writes into register \$t0

3. What does the following instruction do:

sw \$t0, 45(\$s0)

stores value in register \$t0 in address location (\$s0+45)

4. What does the following instruction do:

bne \$t0, \$s5, 8

Checks if \$t0 == \$s5 and if so branches 9 instructions forward.

5. Why should registers be saved by a function?

A function might overwrite registers that the caller used. Or the function might call other functions that might over-write these registers. For these reasons it must save the “callee-saved” registers which are agreed upon by a convention (called the Abstract Binary Interface standard)