

# Solutions

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## Question 1

(a) 3.75

(b) A 2.95

(c) A

## Question 2

(a) Unaligned memory access at sw

(b) think about it

## Question 3

For X with hidden 1 4480 without hidden 1 384

## Question 4

3.52 GHz

## Question 5

2.5

## Question 6

F D X M W

F D X M W

F D X M W

F D X M W

F D X M W

## Question 7

```
module p7(number, carry, zero, A,B,fun);
input [3:0] A,B;
input [1:0] fun;
output reg [3:0] number;
output carry, zero;

reg mycarry;
assign carry=mycarry;

assign zero = (number == 4'b0000)? 1'b1: 1'b0;

always @(*)
    begin
        {mycarry,number} = A+B;
    end
endmodule
```