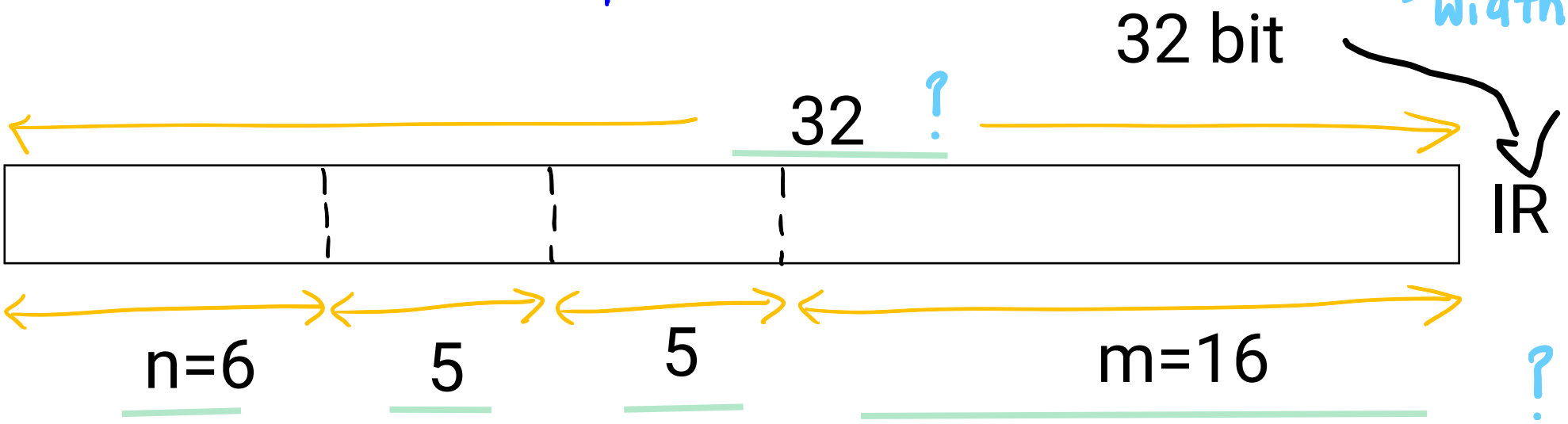
SU16 QA [144] - [156]

[144]

addi $t0 $t1 24

? lengths / widths



[145] Review [146] Review [148, 149] Review

data = ! W [264]

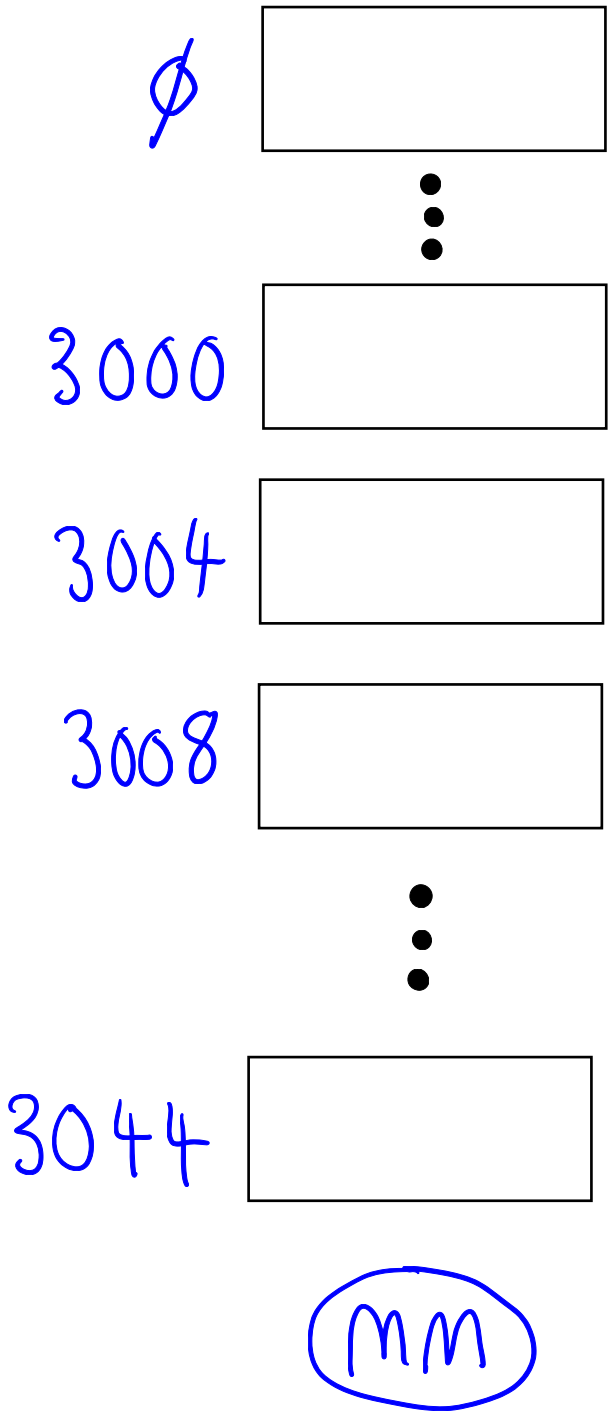
address = ! R + K_d

R → 1000000 (base address)

K_d = 200 (offset)

address = 264d

(2)



We wish to add up all numbers at words 3004 to 3044 inclusive.

Base address 3004

The offsets (in increasing order)

CARE!

4, 8, 12, 16, 20

... 32, 36, 40

CARE!

REVIEW [151] [152]

[153] Given addi R S 8_d illustrate ③

the execution if !S = ($\in Bin^{32}$)

00000000.00000000.00000000.00100000

← 32 digits →

SEMANTICS $R_8 = !S + sx(\vec{b})$ $\vec{b}_S = 8_d$

$\in Bin^{32}$ $\in Bin^{16}$

$8_d = \vec{0.01000} \in Bin^{16}$

$sx(\vec{b}) = 0.\vec{0}.\vec{0}.0100 \in Bin^{32}$

You try with -8

o !S $\vec{0.0100000}$

o o $+ sx(\vec{b})$ is $+ \vec{0.0100}$

$\vec{0.0100100} \in Bin^{32}$