

Question 1

10 out of 10 points



What is the correct PIC24 assembly instruction to move a byte from memory location 0x1005 to WREG?

Selected Answer: `mov.b 0x1005, WREG`

Question 2

10 out of 10 points



What is the correct PIC24 assembly instruction to add 11 to the contents of working register W7?

Selected Answer: `add W7, #11, W7`

Question 3

0 out of 10 points



What is the correct PIC24 assembly instruction to add the word from data memory at 0x0850 with the value in WREG and store it in data memory at 0x0850?

Selected Answer: `add 0x0850, 0x0850`

Question 4

10 out of 10 points



Before

Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB1
W1	0xAB9A	0x1002	0x0193
W2	0x0015	0x1004	0x5548
W3	0x1002	0x1006	0x59C1
W4	0x1009	0x1008	0x293A

Using the register and data memory contents listed in the table above, what is the byte stored at 0x1009?

Selected Answer: `0x29`

Question 5

10 out of 10 points



Before

Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB1
W1	0xAB9A	0x1002	0x0193
W2	0x0015	0x1004	0x5548
W3	0x1002	0x1006	0x59C1
W4	0x1003	0x1008	0x293A

After

Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB1
W1	0xAB9A	0x1002	0x0193
W2	0x0015	0x1004	0x5548
W3	0x1002	0x1006	0xAB9A
W4	0x1003	0x1008	0x293A

Using the **BEFORE** and **AFTER** register and data memory contents, select the PIC24 assembly instruction required to result in the change.

Selected Answer: `mov W1, 0x1006`

Question 6

10 out of 10 points



Before

Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB1

Question 6

10 out of 10 points

Before			
Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB1
W1	0xAB9A	0x1002	0x0193
W2	0x0015	0x1004	0x5548
W3	0x1002	0x1006	0x59C1
W4	0x1003	0x1008	0x293A
After			
Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB0
W1	0xAB9A	0x1002	0x0193
W2	0x0015	0x1004	0x5548
W3	0x1002	0x1006	0x59C1
W4	0x1003	0x1008	0x293A

Using the **BEFORE** and **AFTER** register and data memory contents, select the PIC24 assembly instruction required to result in the change.

Selected Answer: dec 0x1000

Question 7

10 out of 10 points

Before			
Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB1
W1	0xAB9A	0x1002	0x0193
W2	0x0015	0x1004	0x5548
W3	0x1002	0x1006	0x59C1
W4	0x1003	0x1008	0x293A
After			
Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB1
W1	0xAB9A	0x1002	0x0193
W2	0x0015	0x1004	0x5548
W3	0x1002	0x1006	0x59C1
W4	0x1005	0x1008	0x293A

Using the **BEFORE** and **AFTER** register and data memory contents, select the PIC24 assembly instruction required to result in the change.

Selected Answer: add.b W3, W4, W4

Question 8

10 out of 10 points

How long would it take to execute 33 PIC24 instructions if the clock frequency was 22 MHz?

Selected Answer: 3 us

Question 9

0 out of 10 points



Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB1
W1	0xAB9A	0x1002	0x0193
W2	0x0015	0x1004	0x5548
W3	0x1002	0x1006	0x59C1
W4	0x1003	0x1008	0x293A

Using the register and data memory contents listed in the table above, after executing the instruction: **com W0, W0**

What are the contents of **W0**? Enter your answer in hex format (i.e. 0xABCD)

Selected Answer: 0xFF9

Question 10

10 out of 10 points



Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB1
W1	0xAB9A	0x1002	0x0193
W2	0x0015	0x1004	0x5548
W3	0x1002	0x1006	0x59C1
W4	0x1003	0x1008	0x293A

Using the register and data memory contents listed in the table above, after executing the instruction: **and W0, W1, W2**

What are the contents of **W2**? Enter your answer in hex format (i.e. 0xABCD)

Selected Answer: 0x0002

Question 11

10 out of 10 points



Register	Content	Data Memory	Content
W0	0x1006	0x1000	0xFEB1
W1	0xAB9A	0x1002	0x0193
W2	0x0015	0x1004	0x5548
W3	0x1002	0x1006	0x59C1
W4	0x1003	0x1008	0x293A

Using the register and data memory contents listed in the table above, after executing the instruction: **ior W0, W1, W2**

What are the contents of **W2**? Enter your answer in hex format (i.e. 0xABCD)

Selected Answer: 0xBB9E