**4.1.10 Section Review**

1. What are the three basic types of operands?

They are label, operands, comment

2. *(True/False):* The destination operand of a MOV instruction cannot be a segment register.

True

3. *(True/False):* In a MOV instruction, the second operand is known as the *destination* operand.

True

4. *(True/False):* The EIP register cannot be the destination operand of a MOV instruction.

True

5. In the operand notation used by Intel, what does *reg/mem32* indicate?

It is a 32-bit operand.

6. In the operand notation used by Intel, what does *imm16* indicate?

16-bit immediate doubleword value

***Use the following variable definitions for the remaining questions in this section:***

.data

var1 SBYTE -4,-2,3,1

var2 WORD 1000h,2000h,3000h,4000h

var3 SWORD -16,-42

var4 DWORD 1,2,3,4,5

7. For each of the following statements, state whether or not the instruction is valid:

a. mov ax,var1 - VALID

b. mov ax,var2 – NOT VALID

c. mov eax,var3 - VALID

d. mov var2,var3 - VALID

e. movzx ax,var2 - NOT VALID

f. movzx var2,al - NOT VALID

g. mov ds,ax - VALID

h. mov ds,1000h - VALID

8. What will be the hexadecimal value of the destination operand after each of the following instructions execute in sequence?

mov al,var1 ; a. - FC

mov ah,[var1+3] ; b. - 01

9. What will be the value of the destination operand after each of the following instructions execute in sequence?

mov ax,var2 ; a. - 1000

mov ax,[var2+4] ; b. - 3000

mov ax,var3 ; c. - FFF0

mov ax,[var3-2] ; d. - 4000

10. What will be the value of the destination operand after each of the following instructions execute in sequence?

mov edx,var4 ; a. - 00000001

movzx edx,var2 ; b. - 00001000

mov edx,[var4+4] ; c. - 00000002

movsx edx,var1 ; d. - FFFFFFFC