

```

1  ABSDIF  MACRO  OP1,OP2,SIZE
2          LOCAL  EXIT
3          IFNB   <SIZE>          ;; IF SIZE IS NOT BLANK
4          IFDIF  <SIZE>,<E>      ;; THEN IT MUST BE E
5          ; ERROR -- SIZE MUST BE E OR BLANK
6          .ERR
7          EXITM
8          ENDF   ;; END OF IFDIF
9          ENDF   ;; END OF IFNB
10         MOV    SIZE&AX,OP1    ; COMPUTE ABSOLUTE DIFFERENCE
11         SUB    SIZE&AX,OP2    ; SUBTRACT OP2 FROM OP1
12         JNS    EXIT           ; EXIT IF RESULT GE 0
13         NEG    SIZE&AX        ; OTHERWISE CHANGE SIGN
14  EXIT:
15         ENDM

```

(a)

```

        ABSDIF  J,K
        ↓
        MOV     AX,J             ; COMPUTE ABSOLUTE DIFFERENCE
        SUB     AX,K
        JNS     ??0000
        NEG     AX
??0000:

```

(b)

```

        ABSDIF  M,N,E
        ↓
        MOV     EAX,M            ; COMPUTE ABSOLUTE DIFFERENCE
        SUB     EAX,N
        JNS     ??0001
        NEG     EAX
??0001:

```

(c)

```

        ABSDIF  P,Q,X
        ↓
        ; ERROR -- SIZE MUST BE E OR BLANK

```

(d)

Figure 4.12 Examples of MASM macro and conditional statements.