NAME
TPVSUB − Find and normalize the difference DIFF=A−B between two-part values.

SYNOPSIS
CALL TPVSUB(A,B,L, DIFF)

A   is the minuend two-part value
B   is the subtrahend two-part value
L   is the number of small things in a big one
DIFF   is the difference two-part value A−B

DESCRIPTION
The routine first normalizes A and B in-place. Then it subtracts the small parts of B from the small parts of A and the big parts of B from the big parts of A. Finally, it normalizes the difference DIFF. The same variable can be passed for A and DIFF, or for B and DIFF. If the same variable is passed for A, B, and DIFF then it will be [0,0] on return.

WARNING
Input quantities A and B might be changed when they are normalized.

SEE ALSO
TPVNML, which normalizes a 2-part value (and which this routine uses)
TPVADD, which adds 2-part values
TPVSCL, which scales a 2-part value by a REAL*8 factor
TPVMLT, which multiplies 2-part values to yield REAL*8
TPVDIV, which divides one 2-part value by another to yield REAL*8
TPVMAX, which returns the larger of 2-part values
TPV2R8, which returns a REAL*8 for a 2-part value
R82TPV, which returns a 2-part value for a REAL*8

LINKAGE
gfortran   source.f   −L${HOME}/lib   −lmisc

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EXAMPLE
```
        INTEGER*4 A(2)/5,1/,B(2)/0,4/,DIFF(2)
        CALL TPVSUB(A,B,12, DIFF)
        WRITE(6,901) A,B,DIFF
  901 FORMAT('[',I2,',',I2,']-[',I2,',',I2,']=[',I2,',',I2,']')
        STOP
        END
```

This program finds that $5+1/12 − 0+4/12 = 4+9/12$, as shown by the output below.

```
unix[1] a.out
[ 5, 1]-[ 0, 4]=[ 4, 9]
unix[2]
```