

TRANSFORM requests a linear transformation of the dependent variables and covariates.

```
TRANSFORM (variable list1/variable list2/...) =
  [ORTHONORM] { DEVIATIONS (refcat)
                DIFFERENCE
  [BASIS]     { HELMERT
  [CONTRAST]  { SIMPLE (refcat)
                REPEATED
                POLYNOMIAL [(metric)]
                SPECIAL (matrix)
                WSDSIGN <effect list> }
```

WSDSIGN specifies the model for the within-subjects factors and RENAME can be used to rename the transformed variables.

```
WSDSIGN = < effect list > /
RENAME = newname1, newname2, ... /
```

The second category contains subcommands PRINT, PLOT, and PUNCH, which control the amount of optional output produced by MANOVA.

```
PRINT = CELLINFO( [MEANS] [SSCP] [COV] [COR] )
or
NOPRINT HOMogeneity( [BARTLETT] [COCHRAN] [BOXM] )
DESIGN( [ONEWAY] [OVERALL] [BIAS] [DECOMP]
        [SOLUTION] )
PRINCOMP( [COR] [COV] [MINEIGEN(eigcut)]
          [NCOMP(n)] [ROTATE(rotttyp)] )
ERROR( [SSCP] [COV] [COR] [STDV] )
SIGNIF( [HYPOTH] [MULTIV] [EIGEN]
        [DIMENR] [UNIV] [STEPDOWN]
        [AVERF] [BRIEF] [SINGLEDF] )
DISCRIM( [RAW] [STAN] [ESTIM] [COR]
         [ROTATE(rotttyp)] [ALPHA(alpha)] )
PARAMETERS( [ESTIM] [COR] [ORTHO] [NEGSUM] )
OMEANS( ( VARIABLES(var list)
          TABLES( table requests ) ) )
PMEANS( ( VARIABLES(var list)
          TABLES( table requests )
          ERROR( errorn ) ) )
POBS [ ERROR( errorn ) ]
FORMAT( [WIDE] ) /
       [NARROW]
PLOT = [CELLPLOTS] [NORMAL] [BOXPLOTS]
       [STEMLEAF] [ZCORR] [PMEANS]
       [POBS]
       [ SIZE( nhor , nvert ) ] /
PUNCH = CELLINFO( [MEAN] [SSCP] [COR] [COV] [STDV] )
        ERROR( [SSCP] [COR] [COV] [STDV] )
        PMEANS [ ( ERROR( errorn ) ) ]
        POBS [ ( ERROR( errorn ) ) ] /
```

The last category consists of the subcommands that indicate the computational options and model specifications. METHOD provides several options for parameter estimation.

```
METHOD = MODELTYPE( [MEANS]
                    [OBSERVATIONS]
                    [CHOLESKY]
                    [QR] [LASTRES] [CONSTANT] )
                    [BALANCED] [NOLASTRES] [NOCONST]
                    [NOBALANCED]
SSTYPE( [SEQUENTIAL] ) /
       [UNIQUE]
```

ANALYSIS subsets and/or reorders the variables.

```
ANALYSIS = <dep var list> WITH <covar list> /
- or -
ANALYSIS[ (CONDITIONAL) ] = <dep list 1> WITH <covar list 1> /
[ (UNCONDITIONAL) ]     <dep list 2> WITH <covar list 2> / ...
WITH <covar list> /
```