

Index

A

ACCELERATE= option, ITEM statement (PMENU) 751
 ACROSS option, DEFINE statement (REPORT) 910
 ACROSS= option, PROC FORMS statement 484
 activities data set 93, 114
 adjusted logit odds ratio 561
 adjusted odds ratio 560
 AFTER= option, PROC CPORT statement 316
 AGE statement, DATASETS procedure 337
 AGREE option, TABLES statement (FREQ) 516
 ALIGN= option, PROC FORMS statement 484
 ALL class variable 1212
 ALL keyword 1077
 ALL option
 PROC UNIVARIATE statement 1326
 TABLES statement (FREQ) 517
 ALLOBJS option, PROC COMPARE statement 227
 ALLSTATS option, PROC COMPARE statement 227
 ALLVARS option, PROC COMPARE statement 227
 ALPHA= option
 EXACT statement (FREQ) 509
 HISTOGRAM statement (UNIVARIATE) 1340
 PROBPLOT statement (UNIVARIATE) 1367
 PROC MEANS statement 628
 PROC UNIVARIATE statement 1326
 QQPLOT statement (UNIVARIATE) 1378
 TABLES statement (FREQ) 517
 ALPHA option, PROC CORR statement 279
 ALTER= option
 AGE statement (DATASETS) 337
 CHANGE statement (DATASETS) 345
 COPY statement (DATASETS) 350
 DELETE statement (DATASETS) 354
 EXCHANGE statement (DATASETS) 358
 MODIFY statement (DATASETS) 367
 PROC DATASETS statement 335
 REPAIR statement (DATASETS) 371
 SELECT statement (DATASETS) 374
 ALTER TABLE statement, SQL procedure 1031
 alternative hypotheses 1486
 ANALYSIS option, DEFINE statement (REPORT) 910

analysis variables
 SUMMARY procedure 1151
 weights for 73
 Anderson-Darling EDF test 1398
 Anderson-Darling statistic 1399
 ANNOKEY option
 HISTOGRAM statement (UNIVARIATE) 1340
 PROBPLOT statement (UNIVARIATE) 1367
 QQPLOT statement (UNIVARIATE) 1378
 ANNOTATE= option
 HISTOGRAM statement (UNIVARIATE) 1340
 PROBPLOT statement (UNIVARIATE) 1367
 PROC UNIVARIATE statement 1327
 QQPLOT statement (UNIVARIATE) 1378
 ANOVA statistic 559
 ANSI Standard, and SQL procedure 1098
 APPEND procedure 83
 versus APPEND statement (DATASETS) 343
 APPEND statement, DATASETS procedure 339
 appending data sets 330, 339
 APPEND procedure versus APPEND statement (DATASETS) 343
 APPEND statement (DATASETS) versus SET statement 340
 compressed data sets 341
 data sets with different variables 342
 indexed data sets 341
 integrity constraints and 343
 password-protected data sets 341
 restricting observations 340
 system failures 343
 variables with different attributes 342
 with generation groups 343
 appending observations 83
 APPENDVER= option, APPEND statement (DATASETS) 339
 arc-sine distribution 1407
 arithmetic mean 1461, 1467
 ASCENDING option
 CHART procedure 190
 CLASS statement (MEANS) 636
 CLASS statement (TABULATE) 1167
 ASCII option, PROC SORT statement 1008
 ASCII sorting order 1013
 ASIS option, PROC CPORT statement 316
 ASIS= style attribute 47
 asymptotic tests 523, 534
 ATTR= option, TEXT statement (PMENU) 759

ATTRIB statement 67
 audit files 344
 AUDIT statement, DATASETS procedure 343
 AUTOLABEL option, OUTPUT statement (MEANS) 644
 AUTONAME option, OUTPUT statement (MEANS) 645
 AXIS= option
 CHART procedure 190
 PLOT statement (TIMEPLOT) 1254

B

BACKGROUND= style attribute 47
 BACKGROUNDIMAGE= style attribute 48
 bar charts 178
 BARWIDTH= option, HISTOGRAM statement (UNIVARIATE) 1340
 BASE= argument, APPEND statement (DATASETS) 339
 base data set 222
 BASE= option, PROC COMPARE statement 227
 BASETYPE= option, PROC DBCSTAB statement 408
 BATCH option, PROC DISPLAY statement 412
 BEST= option, PROC CORR statement 279
 beta distribution 1406, 1412
 BETA option
 HISTOGRAM statement (UNIVARIATE) 1340
 PROBPLOT statement (UNIVARIATE) 1368
 QQPLOT statement (UNIVARIATE) 1379
 HISTOGRAM statement (UNIVARIATE) 1341
 PROBPLOT statement (UNIVARIATE) 1368
 QQPLOT statement (UNIVARIATE) 1379
 BETWEEN condition component 1057
 BETWEEN= option, PROC FORMS statement 484
 BINOMIAL option, TABLES statement (FREQ) 517
 binomial proportions 543
 block charts 179
 BLOCK statement, CHART procedure 185
 BORDERCOLOR= style attribute 48
 BORDERCOLORDARK= style attribute 48
 BORDERCOLORLIGHT= style attribute 48
 BORDERWIDTH= style attribute 48

BOTH option
 CLEAR statement (TRANTAB) 1297
 LIST statement (TRANTAB) 1298
 SAVE statement (TRANTAB) 1300
 Bowker's test of symmetry 552
 BOX option
 PLOT statement (PLOT) 701
 PROC REPORT statement 881
 TABLE statement (TABULATE) 1174
 box plots 1389
 side-by-side 1390
 break lines 874
 BREAK statement, REPORT procedure 894
 BREAK window, REPORT procedure 923
_{_BREAK_} automatic variable 875
 Breslow-Day test 563
 BRIEFSUMMARY option, PROC COMPARE statement 228
 browsing external files 605
 BTTYPE= option, PROC DBCSTAB statement 408
 BY line, suppressing 54
 BY statement 68
 CALENDAR procedure 99
 CHART procedure 186
 COMPARE procedure 232
 CORR procedure 283
 example 69
 FORMS procedure 487
 FREQ procedure 507
 MEANS procedure 634, 638
 PLOT procedure 698
 PRINT procedure 791
 procedures supporting 69
 RANK procedure 838
 REPORT procedure 898
 SORT procedure 1012
 STANDARD procedure 1140
 TABULATE procedure 1166
 TIMEPLOT procedure 1251
 TRANSPOSE procedure 1273
 UNIVARIATE procedure 1333, 1364
 BY variable names, inserting into titles 56
 BY-group processing 54, 69
 formats and 64

C

C= option
 HISTOGRAM statement (UNIVARIATE) 1341
 PROBPLOT statement (UNIVARIATE) 1368
 QQPLOT statement (UNIVARIATE) 1379
 calculated columns 1058
 CALCULATED component 1057
 CALEDATA= option, PROC CALENDAR statement 93
 calendar data set 93, 112, 113, 116
 CALENDAR procedure 86
 activities data set 114

activity lines 120
 automating scheduling tasks 141
 BY statement 99
 calendar data set 116
 calendar reports 111
 calendar types 109
 calendar, defined 111
 CALID statement 100, 113
 concepts 109
 customizing appearance 120
 date versus datetime values 115
 default calendars 110
 default workshifts 117
 definitions 111
 DUR statement 101
 duration 101
 examples 120
 FIN statement 102
 formatting characters 94
 holiday duration 103
 holidays data set 115
 holidays, during nonwork periods 116
 HOLIDUR statement 102
 HOLIFIN statement 103
 HOLISTART statement 104
 HOLIVAR statement 104
 input data sets 113
 MEAN statement 105
 missing values 118
 multiple calendars 99, 111
 OUTDUR statement 106
 OUTFIN statement 106
 output, effects of size 120
 output, quantity of 119
 OUTSTART statement 107
 PROC CALENDAR statement 93
 project management tasks 89
 results 119
 schedule calendars 87, 88, 109
 START statement 107
 SUM statement 108
 summary calendars 90, 110, 115
 syntax 92
 task tables 92, 93
 VAR statement 108
 workdays data set 117
 calendar reports 111
 CALID statement, CALENDAR procedure 100, 113
 CALL DEFINE statement, REPORT procedure 899
_{_CAL_} variable 113
 CAPS option, PROC FSLIST statement 607
 Cartesian product 1069, 1070
 CASE expression component 1058
 case-record data 525
 CATALOG= argument
 PROC CATALOG statement 157
 PROC DISPLAY statement 412

CATALOG= option
 CONTENTS statement (CATALOG) 159
 PROC PMENU statement 747
 CATALOG= option, PROC DBCSTAB statement 408
 CATALOG procedure 155
 catalog concatenation 169
 CHANGE statement 159
 concepts 166
 CONTENTS statement 159
 COPY statement 160
 DELETE statement 162
 ending a step 166
 entry type specification 167
 ENTRYTYPE= options 167, 168
 error handling 166
 examples 170
 EXCHANGE statement 162
 EXCLUDE statement 163
 interactive processing 166
 MODIFY statement 164
 results 170
 RUN groups 166
 RUN groups and batch jobs 166
 SAVE statement 165
 SELECT statement 165
 syntax 156
 task tables 156, 157, 160
 categories 1155
 CAXIS= option
 HISTOGRAM statement (UNIVARIATE) 1342
 PROBPLOT statement (UNIVARIATE) 1368
 QQPLOT statement (UNIVARIATE) 1379
 CBARLINE= option, HISTOGRAM statement (UNIVARIATE) 1342
 CC option
 FSLIST command 610
 PROC FORMS statement 484
 PROC FSLIST statement 607
 cell count data 525
 CELLCHI2 option, TABLES statement (FREQ) 517
 CELLHEIGHT= style attribute 48
 CELLPADDING= style attribute 48
 CELSPACING= style attribute 48
 CELLWIDTH= style attribute 49
 CENTER option
 DEFINE statement (REPORT) 910
 PROC REPORT statement 881
 CENTILES option
 CONTENTS statement (DATASETS) 347
 centiles, for indexed variables 363
 CFILL= option
 HISTOGRAM statement (UNIVARIATE) 1342
 INSET statement (UNIVARIATE) 1357
 CFILLH= option, INSET statement (UNIVARIATE) 1357

- CFRAME= option
 HISTOGRAM statement (UNIVARIATE) 1342
 INSET statement (UNIVARIATE) 1357
 PROBPLOT statement (UNIVARIATE) 1368
 QQPLOT statement (UNIVARIATE) 1379
- CFRAMESIDE= option
 HISTOGRAM statement (UNIVARIATE) 1342
 PROBPLOT statement (UNIVARIATE) 1368
 QQPLOT statement (UNIVARIATE) 1379
- CFRAMETOP= option
 HISTOGRAM statement (UNIVARIATE) 1342
 PROBPLOT statement (UNIVARIATE) 1369
 QQPLOT statement (UNIVARIATE) 1380
- CFREQ option, CHART procedure 191
 CGRID= option, HISTOGRAM statement (UNIVARIATE) 1342
- CHANGE statement
 CATALOG procedure 159
 DATASETS procedure 345
- character sets, and translation tables 1292
- character variables, sorting orders for 1012
- CHART procedure 177
 bar charts 178
 block charts 179, 185
 BLOCK statement 185
 BY groups 186
 BY statement 186
 concepts 195
 customizing charts 189
 examples 196
 formatting characters 183
 HBAR statement 187
 horizontal bar charts 187
 missing values 193, 195
 options 190
 pie charts 180, 187
 PIE statement 187
 PROC CHART statement 183
 results 195
 star charts 181, 188
 STAR statement 188
 syntax 183
 variable characteristics 195
 VBAR statement 189
 vertical bar charts 189
- charts 177
 block charts 179
 pie charts 180
 star charts 181
- CHARTYPE option, PROC MEANS statement 628
- CHEADER= option, INSET statement (UNIVARIATE) 1357
- CHECKBOX statement, PMENU procedure 748
- checkboxes 748, 750
- chi-square tests 529
- continuity-adjusted 531
- for one-way tables 530
 for two-way tables 530
 likelihood-ratio 531
 Mantel-Haenszel 531
- CHISQ option, TABLES statement (FREQ) 517
- CHREF= option
 HISTOGRAM statement (UNIVARIATE) 1342
 PROBPLOT statement (UNIVARIATE) 1369
 QQPLOT statement (UNIVARIATE) 1380
- CIBASIC option, PROC UNIVARIATE statement 1327
- CIMPORT procedure 211
 Data Control Blocks 217
 examples 217
 EXCLUDE statement 215
 excluding files or entries 215
 PROC CIMPORT statement 212
 results 217
 SELECT statement 216
 specifying entries or files to import 216
 syntax 212
 task table 212
 translation tables with 1293
- CIPCTLDF option, PROC UNIVARIATE statement 1327
- CIPCTLNORMAL option, PROC UNIVARIATE statement 1328
- CIQUANTDF option, PROC UNIVARIATE statement 1327
- CIQUANTNORMAL option, PROC UNIVARIATE statement 1328
- CL option, TABLES statement (FREQ) 518
- CLASS statement
 MEANS procedure 635
 TABULATE procedure 1167
 TIMEPLOT procedure 1251
 UNIVARIATE procedure 1333
- CLASSDATA= option
 PROC MEANS statement 628
 PROC TABULATE statement 1159
- CLASSLEV statement, TABULATE procedure 1170
- CLEAR statement, TRANTAB procedure 1297
- CLEARSASUSER option, PROC REGISTRY statement 850
- CLM keyword 1465
- CLONE option
 COPY statement (DATASETS) 350
- CMH option, TABLES statement (FREQ) 518
- CMH1 option, TABLES statement (FREQ) 518
- CMH2 option, TABLES statement (FREQ) 518
- CNTLIN= option, PROC FORMAT statement 436
- CNTLOUT= option, PROC FORMAT statement 436, 438
- COALESCE function 1082
- Cochran's Q test 556
- Cochran-Armitage test for trend 548
- Cochran-Mantel-Haenszel statistics 557
- coefficient of variation 1460, 1472
- color attributes 44
- COLOR= option
 BREAK statement (REPORT) 894
 DEFINE statement (REPORT) 910
 HISTOGRAM statement (UNIVARIATE) 1342
 PROBPLOT statement (UNIVARIATE) 1369
- PROC PMENU statement 748
- QQPLOT statement (UNIVARIATE) 1380
- RBREAK statement (REPORT) 919
- RBUTTON statement (PMENU) 756
- TEXT statement (PMENU) 759
- column aliases 1046
- COLUMN statement, REPORT procedure 903
- column-definition component 1059
- column-header option, DEFINE statement (REPORT) 910
- column-modifier component 1060
- column-name component 1061
- columns 1023
- COLWIDTH= option, PROC REPORT statement 881
- COMMAND option, PROC REPORT statement 882
- COMPARE= option, PROC COMPARE statement 228
- COMPARE procedure 221
 BY processing 233
 BY statement 232
 comparing a variable multiple times 256
 comparing different variables in same data set 236
 comparing selected variables 236
 comparing unsorted data 234
 comparing variables in different data sets 255
 comparing variables in same data set 258
 comparing variables of different names 236
 comparison by position of observations 236
 comparison results by observation 247
 comparisons with ID variables 237, 259
 concepts 236
 data set summary 242
 duplicate ID values, avoiding 234
 equality criterion 238
 examples 251
 formatted values 240
 ID statement 234
 ID variable requirements 234
 listing variables for matching observations 234
 macro return codes 240
 observation summary 243
 output 242
 output data set 248, 263
 output statistics data set 249
- PROC COMPARE statement 226
- results 240
- SAS log and 240
- selecting variables to compare 235
- summary statistics table 245, 265

- syntax 225
task tables 225, 226
value comparison results 245
values comparison summary 244
VAR statement 235
variables summary 242
WITH statement 236
COMPARETO= option, PROC REGISTRY statement 850
comparing SAS data sets 221
See COMPARE procedure
comparison data set 222
COMPLETETYPES option, PROC MEANS statement 629
composite indexes 1034
COMPRESS option, PROC FREQ statement 505
compressed data sets, appending 341
compute blocks 871
COMPUTE statement, REPORT procedure 905
COMPUTE window, REPORT procedure 927
COMPUTED option, DEFINE statement (REPORT) 911
COMPUTED VAR window, REPORT procedure 927
CONDENSE option, TABLE statement (TABULATE) 1174
confidence limits 508, 534
for quantiles 1404
for the mean 624
MEANS procedure 652
UNIVARIATE procedure 1393
confidence limits, for the mean
keywords and formulas 1465
one-sided, above the mean 1465
one-sided, below the mean 1465
two-sided 1465
CONNECT statement, SQL procedure 1033
CONNECTION TO component 1062
CONSTRAINT= option
COPY statement (DATASETS) 350
PROC CPORT statement 316
CONTAINS condition component 1062
CONTENTS= option
PROC TABULATE statement 1159
TABLE statement (TABULATE) 1174
CONTENTS procedure 267
PROC CONTENTS statement 268
syntax 268
task table 268
versus CONTENTS statement (DATASETS) 349
CONTENTS statement
CATALOG procedure 159
DATASETS procedure 347
contingency coefficient 533
contingency tables 501, 1233
continuation messages 1156
continuity-adjusted chi-square test 531
CONTOUR= option, PLOT statement (PLOT) 701
contour plots 701, 725
CONVERGE= option, TABLES statement (FREQ) 518
conversion tables, for double-byte character sets 407
converting SAS files 211, 313
COPIES= option, PROC FORMS statement 484
COPY procedure 269
concepts 270
syntax 270
transporting SAS data sets between hosts 270
versus COPY statement (DATASETS) 353
COPY statement
CATALOG procedure 160
DATASETS procedure 349
TRANSPOSE procedure 1275
copying SAS files 269
COPY statement (DATASETS) versus COPY procedure 353
data sets with long variable names 353
entire data library 351
excluding files 358
member type specification 351
password-protected files 352
selecting files 351, 374
CORR procedure 273
BY statement 283
computer resources 287
concepts 286
correlation coefficients, interpreting 286
examples 300
FREQ statement 284
missing values 297
output 297
output data sets 298
PARTIAL statement 284
PROC CORR statement 278
results 297
statistical computations 289
syntax 277
task tables 277, 278
VAR statement 285
WEIGHT statement 285
WITH statement 286
corrected sum of squares 1460
corrected sums of squares and crossproducts 279
correlation coefficients 273
calculating limited combinations of 286
interpreting 286
printing, for each variable 279, 281
suppressing probabilities 280
correlation statistic 559
CORRESPONDING keyword 1077
COUNT(*) function 1089
COV option, PROC CORR statement 279
covariances 279, 282
CPERCENT option, CHART procedure 191
CPM procedure 89, 141
CPORT procedure 313
concepts 321
Data Control Blocks 322
examples 323
EXCLUDE statement 319
excluding files or entries 319
including files or entries 320
password-protected data sets 321
PROC CPRT statement 314
results 322
SELECT statement 320
syntax 314
task table 314
translation tables 321
translation tables with 1293
TRANTAB statement 321
CPROP= option, HISTOGRAM statement (UNIVARIATE) 1343
Cramer's V 533
Cramer-von Mises EDF test 1398
Cramer-von Mises statistic 1399
CREATE INDEX statement, SQL procedure 1034
CREATE TABLE statement, SQL procedure 1035
CREATE VIEW statement, SQL procedure 1037
CRITERION= option, PROC COMPARE statement 228
Cronbach's coefficient alpha 273, 279, 293, 306
crosstabulation tables 501, 514, 1233
CSHADOW= option, INSET statement (UNIVARIATE) 1357
CSS keyword 1460
CSSCP option, PROC CORR statement 279
CTEXT= option
HISTOGRAM statement (UNIVARIATE) 1343
INSET statement (UNIVARIATE) 1357
PROBPLOT statement (UNIVARIATE) 1369
QQPLOT statement (UNIVARIATE) 1380
CUMCOL option, TABLES statement (FREQ) 519
cumulative distribution function 1466
CV keyword 1460
CVREF= option
HISTOGRAM statement (UNIVARIATE) 1343
PROBPLOT statement (UNIVARIATE) 1369
QQPLOT statement (UNIVARIATE) 1380

D

- DANISH option, PROC SORT statement 1008
DATA= argument, PROC EXPORT statement 424
DATA COLUMNS window, REPORT procedure 928
Data Control Blocks (DCBs) 217, 322

- DATA= option
 APPEND statement (DATASETS) 340
 CONTENTS statement (DATASETS) 347
 INSET statement (UNIVARIATE) 1356
 PROC CALENDAR statement 93
 PROC CHART statement 183
 PROC COMPARE statement 227
 PROC CORR statement 280
 PROC DBCSTAB statement 408
 PROC FORMS statement 485
 PROC FREQ statement 505
 PROC MEANS statement 629
 PROC PLOT statement 695
 PROC PRINT statement 787
 PROC RANK statement 835
 PROC REPORT statement 882
 PROC SORT statement 1008
 PROC STANDARD statement 1138
 PROC TABULATE statement 1159
 PROC TIMEPLOT statement 1250
 PROC TRANSPOSE statement 1272
 PROC UNIVARIATE statement 1328
 DATA option, INSET statement (UNIVARIATE) 1357
 DATA SELECTION window, REPORT procedure 928
 data set options 17
 SQL procedure with 1094
 DATA step variables 946, 952
 DATA step views 1023
 DATA step window applications, menus for 773
 data summarization tools 624, 1149, 1318
 DATABASE= statement
 EXPORT procedure 426
 IMPORT procedure 615
 DATAFILE= argument, PROC IMPORT statement 612
 DATAROW= statement, IMPORT procedure 614
 DATASETS procedure 330
 AGE statement 337
 APPEND statement 339
 AUDIT statement 343
 CHANGE statement 345
 concepts 375
 CONTENTS statement 347
 COPY statement 349
 DELETE statement 354
 directory listings 380
 ending the procedure 377
 error handling 376
 examples 391
 EXCHANGE statement 357
 EXCLUDE statement 358
 execution of 375
 FORMAT statement 359
 IC CREATE statement 360
 IC DELETE statement 362
 IC REACTIVATE statement 362
 INDEX CENTILES statement 363
 INDEX CREATE statement 363
 INDEX DELETE statement 365
 INFORMAT statement 366
 LABEL statement 366
 MODIFY statement 367
 output data sets 384
 passwords 376, 377
 PROC DATASETS statement 335
 procedure output 380
 RENAME statement 371
 REPAIR statement 371
 restricting member types 378
 results 380
 RUN-group processing 375
 SAVE statement 373
 SELECT statement 374
 syntax 334
 task tables 335, 347, 367
 DATATYPE= option, PICTURE statement (FORMAT) 442
 date formats 467
 DATETIME option, PROC CALENDAR statement 93
 DAYLENGTH= option, PROC CALENDAR statement 94
 DBCSLANG= option, PROC DBCSTAB statement 408
 DBCSTAB procedure 407
 PROC DBCSTAB statement 407
 syntax 407
 DBMS connections 1033
 ending 1041
 LIBNAME statement for 1095
 SQL Procedure Pass-Through Facility for 1095
 storing in views 1038
 DBMS= option
 PROC EXPORT statement 424
 PROC IMPORT statement 612
 DBMS tables, exporting 426
 DBPWD= statement
 EXPORT procedure 426
 IMPORT procedure 615
 DCBs (Data Control Blocks) 217, 322
 DDNAME= argument, PROC FSLIST statement 606
 DDNAME= option
 PROC DATASETS statement 336
 PROC FORMS statement 485
 DEBUGOFF= option, PROC REGISTRY statement 851
 DEBUGON= option, PROC REGISTRY statement 851
 DECSEP= option, PICTURE statement (FORMAT) 442
 DEF option, PROC UNIVARIATE statement 1330
 DEFAULT= option
 INVALUE statement (FORMAT) 439, 453
 PICTURE statement (FORMAT) 442, 453
 VALUE statement (FORMAT) 451, 453
 DEFINE statement, REPORT procedure 908
 DEFINITION window, REPORT procedure 929
 DELETE statement
 CATALOG procedure 162
 DATASETS procedure 354
 SQL procedure 1039
 delimited files, exporting 426, 427
 delimited files, importing 614, 617
 DELIMITER= statement
 EXPORT procedure 426
 IMPORT procedure 614
 density curves 1444
 density function 1466
 DESC= option, PROC DBCSTAB statement 408
 DESC option, PROC PMENU statement 747
 DESCENDING option
 BY statement 68
 BY statement (CALENDAR) 99
 BY statement (CHART) 186
 BY statement (COMPARE) 233
 BY statement (CORR) 283
 BY statement (FORMS) 487
 BY statement (FREQ) 507
 BY statement (MEANS) 635
 BY statement (PLOT) 698
 BY statement (PRINT) 792
 BY statement (RANK) 838
 BY statement (REPORT) 899
 BY statement (SORT) 1012
 BY statement (STANDARD) 1140
 BY statement (TABULATE) 1167
 BY statement (TIMEPLOT) 1251
 BY statement (TRANSPOSE) 1273
 BY statement (UNIVARIATE) 1333
 CHART procedure 191
 CLASS statement (MEANS) 636
 CLASS statement (TABULATE) 1167
 DEFINE statement (REPORT) 911
 ID statement (COMPARE) 234
 PROC RANK statement 836
 DESCENDTYPES option, PROC MEANS statement 629
 DESCRIBE statement, SQL procedure 1040
 DESCRIPTION= argument, MODIFY statement (CATALOG) 164
 DESCRIPTION= option
 HISTOGRAM statement (UNIVARIATE) 1343
 PROBPLOT statement (UNIVARIATE) 1369
 QQPLOT statement (UNIVARIATE) 1380
 descriptive statistics 65, 624, 1149
 based on moments 624
 keywords and formulas 1460
 detail reports 861
 detail rows 861
 DETAILS option
 CONTENTS statement (DATASETS) 348
 PROC DATASETS statement 335
 deviation from the mean 1472

- DEVIATION option, TABLES statement
 (FREQ) 519
- dialog boxes 745, 749
 checkboxes 748
 collecting user input 764
 input fields 758
 searching multiple values 767
 text for 758
- DIALOG= option, ITEM statement
 (PMENU) 752
- DIALOG statement, PMENU procedure 749
- DICTIONARY tables component 1063, 1111
- DIG3SEP= option, PICTURE statement (FORMAT) 442
- digit selectors 444
- directives 445
- DIRECTORY option
 CONTENTS statement (DATASETS) 348
- DISCONNECT statement, SQL procedure 1041
- DISCRETE option, CHART procedure 191
- DISPLAY option, DEFINE statement (REPORT) 911
- DISPLAY PAGE window, REPORT procedure 934
- DISPLAY procedure 411
 example 412
 PROC DISPLAY statement 412
 syntax 411
- distribution 1467
- distribution of numeric variables 1318
- DOL option
 BREAK statement (REPORT) 895
 RBREAK statement (REPORT) 920
- DOUBLE option
 PROC PRINT statement 787
 PROC SQL statement 1028
- double-byte character sets 407
- DOWN= option, PROC FORMS statement 485
- DQUOTE= option, PROC SQL statement 1028
- DROP statement, SQL procedure 1041
- DUL option
 RBREAK statement (REPORT) 895, 920
- DUR statement, CALENDAR procedure 101
- E**
- EBCDIC option, PROC SORT statement 1008
- EBCDIC sorting order 1012
- EDF goodness-of-fit tests 1397, 1400
- EET= option
 PROC CIMPORT statement 213
 PROC CPOR statement 316
- efficiency issues, statistical procedures 7
- elementary statistics procedures 1457
- ENDCOMP statement, REPORT procedure 916
- ENTRYTYPE= option
 CHANGE statement (CATALOG) 159
 COPY statement (CATALOG) 161
 DELETE statement (CATALOG) 162
- EXCHANGE statement (CATALOG) 163
- EXCLUDE statement (CATALOG) 163
- EXCLUDE statement (CIMPORT) 215
- EXCLUDE statement (CPOR) 319
- MODIFY statement (CATALOG) 164
- PROC CATALOG statement 157
- SAVE statement (CATALOG) 165
- SELECT statement (CATALOG) 165
- SELECT statement (CIMPORT) 216
- SELECT statement (CPOR) 320
- equal kappa coefficients 556
- EQUALS option, PROC SORT statement 1008
- equijoins 1069
- error checking, and formats 64
- ERROR option, PROC COMPARE statement 228
- error processing, of BY-group specifications 58
- ERRORSTOP option, PROC SQL statement 1028
- estimates 1467
- ET= option
 PROC CIMPORT statement 213
 PROC CPOR statement 316
- ETYPE= option
 EXCLUDE statement (CIMPORT) 215
- EXCIUDE statement (CPOR) 319
- SELECT statement (CIMPORT) 216
- SELECT statement (CPOR) 320
- event logging 343
- EXACT option, TABLES statement (FREQ) 519
- EXACT statement, FREQ procedure 508
- exact statistics 563
- exact tests 508, 535
- Excel spreadsheets, exporting data to 430
- Excel spreadsheets, importing 620
- EXCEPT operator 1080
- EXCHANGE statement
 CATALOG procedure 162
 DATASETS procedure 357
- EXCLNPWDTs option
 PROC MEANS statement 629
 PROC TABULATE statement 1159
- EXCLNPWGT option
 PROC CORR statement 280
 PROC REPORT statement 882
 PROC STANDARD statement 1139
 PROC UNIVARIATE statement 1328
- EXCLUDE statement
 CATALOG procedure 163
 CIMPORT procedure 215
 CPOR procedure 319
 DATASETS procedure 358
 FORMAT procedure 438
- EXCLUSIVE option
 CLASS statement (MEANS) 636
 CLASS statement (TABULATE) 1168
 PROC MEANS statement 629
 PROC TABULATE statement 1159
- EXEC option, PROC SQL statement 1028
- EXECUTE statement, SQL procedure 1042
- EXISTS condition component 1066
- EXPECTED option, TABLES statement
 (FREQ) 519
- expected value 1467
- EXPLODE procedure 415
 ending PROC EXPLODE step 419
 examples 419
 message lines 417
 Null statement 419
 options 417
- PARMCARDS statement 416
- PARMCARDS4 statement 416
- PROC EXPLODE statement 416
 syntax 416
- exploded output 415
- EXPLORE window, REPORT procedure 934
- Explorer window 156
- exponential distribution 1407, 1412
- EXPONENTIAL option
 HISTOGRAM statement (UNIVARIATE) 1343
- PROBPLOT statement (UNIVARIATE) 1369
- QQPLOT statement (UNIVARIATE) 1380
- EXPORT= option, PROC REGISTRY statement 851
- EXPORT procedure 423
 data source statements 426
 DATABASE= statement 426
 DBMS specifications 425
 DBMS tables 426
 DBPWD= statement 426
 delimited files 426, 427
 DELIMITER= statement 426
 examples 427
 Excel spreadsheets 430
 Microsoft Access tables 427, 431
 PROC EXPORT statement 424
 PWD= statement 426
 syntax 424
 UID= statement 426
 WGDB= statement 427
- exporting data 423
 DBMS tables 426
 delimited files 426, 427
 Microsoft Access tables 427, 431
 SAS Registry 855
 to Excel spreadsheets 430
- exporting files 313
- EXTENDSN= option, PROC CIMPORT statement 213
- external data sources
 importing data 611
- external data sources, writing to 423
- external files
 comparing SAS Registry to 856
 routing output or log to 823
- external files, browsing 605
- extreme observations 1353, 1422
- extreme value distribution 1407
- extreme values 624

F

FEEDBACK option, PROC SQL statement 1028
FILE= option
 CONTENTS statement (CATALOG) 159
 PROC CIMPORT statement 213
 PROC CPORt statement 316
 PROC FORMS statement 485
FILEREF= argument, PROC FSLIST statement 606
FILL option
 HISTOGRAM statement (UNIVARIATE) 1343
FILL= option, PICTURE statement (FORMAT) 442
FILL option, PROC CALENDAR statement 94
FIN statement, CALENDAR procedure 102
FINNISH option, PROC SORT statement 1008
FISHER option, TABLES statement (FREQ) 519
Fisher's exact test 532
fitted continuous distributions 1406
flip charts 415
FLOW option
 DEFINE statement (REPORT) 912
 PROC SQL statement 1029
FLYOVER= style attribute 49
FMTLEN option
 CONTENTS statement (DATASETS) 348
FMTLIB option, PROC FORMAT statement 436, 438, 450
font definitions 47
FONT= option
 HISTOGRAM statement (UNIVARIATE) 1344
 INSET statement (UNIVARIATE) 1357
 PROBPLOT statement (UNIVARIATE) 1369
 QQPLOT statement (UNIVARIATE) 1380
FONT= style attribute 49
FONT_FACE= style attribute 49
FONT_SIZE= style attribute 49
FONT_STYLE= style attribute 49
FONT_WEIGHT= style attribute 49
FONT_WIDTH= style attribute 50
FORCE option
 APPEND statement (DATASETS) 340
 PROC CIMPORT statement 213
 PROC DATASETS statement 336
 PROC DBCSTAB statement 408
 PROC SORT statement 1009
FORCEHIST option, HISTOGRAM statement (UNIVARIATE) 1344
FOREGROUND= style attribute 50
form units 481
FORMAT= option
 DEFINE statement (REPORT) 912
 INSET statement (UNIVARIATE) 1358
 MEAN statement (CALENDAR) 105
 PROC TABULATE statement 1159
 SUM statement (CALENDAR) 108

FORMAT procedure 433
 associating informats and formats with variables 455
 concepts 455
 creating formats from data sets 470
 date formats 467
 digit selectors 444
 directives 445
 examples 463
 EXCLUDE statement 438
 excluding entries from processing 438
 format-name formats 453
 formats for character values 450, 465
 formatted values example 62
 informats for reading and converting raw data 438, 468
 input control data set 460
 INVALUE statement 438
 message characters 444
 options for informats and formats 453
 output 461
 output control data set 458
 permanent informats and formats 457, 474
 picture formats 441, 463, 479
 PICTURE statement 441
 picture-name formats 449
 printing information about informats and formats 473
 PROC FORMAT statement 436
 ranges 454, 476
 results 458
 SELECT statement 450
 selecting entries for processing 450
 shortcuts to specifying names 438, 450
 storing informats and formats 456
 syntax 435
 task tables 435, 436, 438, 441, 450
 template for printing numbers 441
 temporary informats and formats 457
 VALUE statement 450
 values, specifying 454
FORMAT statement 67
 DATASETS procedure 359
format-name formats 453
formats 359, 434
 See also FORMAT procedure
 associating with variables 455
BY-group processing and 64
 creating 433
 creating from data sets 470
 date formats 467
 error checking and 64
 for character values 450, 465
 for columns 1060
 format-name formats 453
 formatted values 59
 permanent 457, 474
 picture formats 441, 445, 463, 479
 picture-name formats 449

printing catalog contents containing formats 433
printing information about 473
storing 456
storing descriptions of 433
temporary 457
temporary associations 62, 63
user-defined 433
FORMATS window, REPORT procedure 935
formatted values 59
FORMCHAR option
 PROC CHART statement 183
 PROC FREQ statement 505
 PROC PLOT statement 695
 PROC REPORT statement 882
 PROC TABULATE statement 1160
 PROC CALENDAR statement 94
FORMS procedure 481
 BY statement 487
 concepts 489
 continuous mode 490
 examples 491
 form layout 489
 FREQ statement 488
 LINE statement 488
 modes of operation 490
 page mode 490
 PROC FORMS statement 483
 procedure output file 491
 syntax 483
 task tables 483, 488
formulas, for statistics 1458
FORTCC option
 FSLIST command 610
 PROC FSLIST statement 607
FRACTION option, PROC RANK statement 836
FRAME applications, associating menus with 779
FRAME= style attribute 50
FREQ option
 CHART procedure 191
 PROC UNIVARIATE statement 1328
FREQ= option, CHART procedure 191
FREQ procedure 501
 adjusted logit odds ratio 561
 adjusted odds ratio 560
 ANOVA statistic 559
 asymptotic tests 534
 binomial proportions 543
 Bowker's test of symmetry 552
 Breslow-Day test 563
 BY statement 507
 chi-square tests and measures 529
 Cochran's Q test 556
 Cochran-Armitage test for trend 548
 Cochran-Mantel-Haenszel statistics 557
 computational algorithms 564
 computational resources 526, 565
 concepts 525
 confidence limits 534
 contingency coefficient 533

- correlation statistic 559
 Cramer's V 533
 crosstabulation tables 514
 definitions 527
 equal kappa coefficients 556
 EXACT statement 508
 exact statistics 563
 exact tests 535
 examples 572
 Fisher's exact test 532
 formatting characters 505
 frequency counts, inputting 525
 frequency tables 514
 gamma 535
 general association statistic 560
 grouping with formats 525
 Jonckheere-Terpstra test 549
 Kendall's tau-b 536
 lambda asymmetric 541
 lambda symmetric 542
 large frequencies, displaying 569
 Mantel-Haenszel adjusted odds ratio 560
 Mantel-Haenszel chi-square test 531
 McNemar's test 552
 measures of agreement 551
 measures of association 533
 missing values 567
 Monte Carlo estimation 566
 negative weights 524
 notation 527
 odds ratio 546
 output 569
 output data sets 511, 570
 OUTPUT statement 511, 571
 overall kappa coefficient 556
 p-values 565
 Pearson correlation coefficient 538
 phi coefficient 533
 polychoric correlation 541
 PROC FREQ statement 504
 relative risk estimates 560
 relative risks 547, 562
 results 567
 risk differences 545
 risks 545
 row mean scores statistic 559
 scores 528
 simple kappa coefficient 552
 Somers' D 537
 Spearman correlation statistics 539
 statistical computations 527
 Stuart's tau-c 536
 suppressing displayed output 569
 syntax 504
 TABLES statement 510, 511, 514, 570
 task tables 504, 515
 TEST statement 523
 uncertainty coefficient asymmetric 542
 uncertainty coefficient symmetric 543
 WEIGHT statement 524
 weighted kappa coefficient 554
 zero rows or columns 557
- FREQ statement 71
 CORR procedure 284
 example 71
 FORMS procedure 488
 MEANS procedure 639
 procedures supporting 71
 REPORT procedure 917
 STANDARD procedure 1141
 TABULATE procedure 1171
 UNIVARIATE procedure 1336
 frequency of observations 71
 frequency tables 501, 514
 FROM clause, SQL procedure 1050
 FSEDIT applications, menu bars 762
 FSLIST command 606, 608
 FSLIST procedure 605
 FSLIST command 606, 608
 PROC FSLIST statement 606
 syntax 605
 FULLSTATUS option, PROC REGISTRY statement 851
 functions, and SQL procedure 1081
 FUZZ= option
 INVALUE statement (FORMAT) 439, 453
 PICTURE statement (FORMAT) 442, 453
 PROC COMPARE statement 228
 TABLE statement (TABULATE) 1174
 VALUE statement (FORMAT) 451, 453
 FW= option, PROC MEANS statement 629
- G**
- G100 option, CHART procedure 192
 gamma 535
 gamma distribution 1407, 1412
 GAMMA option
 HISTOGRAM statement (UNIVARIATE) 1344
 PROBPLOT statement (UNIVARIATE) 1370
 QQPLOT statement (UNIVARIATE) 1381
 Gaussian distribution 1474
 general association statistic 560
 generation groups 343, 353, 355, 370
 GENERATION option, PROC CPRT statement 316
 GENMAX= option, MODIFY statement (DATASETS) 368
 GENNUM= data set option 343
 GENNUM= option
 CHANGE statement (DATASETS) 345
 DELETE statement (DATASETS) 354
 MODIFY statement (DATASETS) 368
 REPAIR statement (DATASETS) 371
 GETDELETED= statement, IMPORT procedure 614
 GETNAMES= statement, IMPORT procedure 615
 Gini's mean difference 1403
 goodness-of-fit tests 1396
 GOUT= option, PROC UNIVARIATE statement 1328
 GRAY option, ITEM statement (PMENU) 752
 GRID option
 HISTOGRAM statement (UNIVARIATE) 1344
 PROBPLOT statement (UNIVARIATE) 1370
 GROUP BY clause, SQL procedure 1052
 GROUP= option
 CHART procedure 191
 GROUP option, DEFINE statement (REPORT) 912
 GROUP= option, PROC OPTIONS statement 687
 GROUPINTERNAL option
 CLASS statement (MEANS) 636
 CLASS statement (TABULATE) 1168
 GROUPS= option, PROC RANK statement 836
 GSPACE= option, CHART procedure 192
- H**
- HAVING clause, SQL procedure 1053
 HAXIS= option, PLOT statement (PLOT) 702
 HBAR statement, CHART procedure 187
 HEADER= option
 INSET statement (UNIVARIATE) 1358
 HEADER= option, PROC CALENDAR statement 96
 header pages 415
 HEADING= option, PROC PRINT statement 787
 HEADLINE option, PROC REPORT statement 884
 HEADSKIP option, PROC REPORT statement 884
 HEIGHT= option
 HISTOGRAM statement (UNIVARIATE) 1344
 INSET statement (UNIVARIATE) 1358
 HELP= option
 ITEM statement (PMENU) 752
 PROC REPORT statement 884
 EXPAND option, PLOT statement (PLOT) 703
 high-resolution graphics 1318
 HILOC option, PLOT statement (TIME-PLOT) 1255
 HISTOGRAM statement, UNIVARIATE procedure 1337
 histograms 1337, 1416
 intervals 1416
 quantiles 1417
 two-way comparative 1450
 HMINOR= option
 HISTOGRAM statement (UNIVARIATE) 1344

- PROBPLOT statement (UNIVARIATE) 1370
 QQPLOT statement (UNIVARIATE) 1381
 HMTLCLASS= style attribute 51
 HMTLID= style attribute 51
 HMTLSTYLE= style attribute 51
 HOEFFDING option, PROC CORR statement 280
 Hoeffding's measure of dependence 273, 280, 291
 examples 300
 output data set with 281
 HOFFSET= option, HISTOGRAM statement (UNIVARIATE) 1345
 HOLIDATA= option, PROC CALENDAR statement 96
 holidays data set 96, 112, 113, 115
 HOLIDUR statement, CALENDAR procedure 102
 HOLIFIN statement, CALENDAR procedure 103
 HOLISTART statement, CALENDAR procedure 104
 HOLIVAR statement, CALENDAR procedure 104
 HOST option, PROC OPTIONS statement 687
 host options listing 687
 host-specific procedures 1491
 HPERCENT= option, PROC PLOT statement 696
 HPOS= option, PLOT statement (PLOT) 704
 HREF= option
 HISTOGRAM statement (UNIVARIATE) 1345
 PROBPLOT statement (UNIVARIATE) 1370
 QQPLOT statement (UNIVARIATE) 1381
 HREF= option, PLOT statement (PLOT) 704
 HREFCHAR= option, PLOT statement (PLOT) 704
 HREFLABELS= option
 HISTOGRAM statement (UNIVARIATE) 1345
 PROBPLOT statement (UNIVARIATE) 1370
 QQPLOT statement (UNIVARIATE) 1381
 HREFLABPOS= option
 HISTOGRAM statement (UNIVARIATE) 1345
 PROBPLOT statement (UNIVARIATE) 1370
 HREFTARGET= style attribute 50
 HREVERSE option, PLOT statement (PLOT) 704
 HSCROLL= option, PROC FSLIST statement 608
 HSPACE= option, PLOT statement (PLOT) 704
 HTML output, ODS 21, 36
 hypotheses, testing 1485
 keywords and formulas 1464
 HZERO option, PLOT statement (PLOT) 704
- IC CREATE statement, DATASETS procedure 360
 IC DELETE statement, DATASETS procedure 362
 IC REACTIVATE statement, DATASETS procedure 362
 ID option, DEFINE statement (REPORT) 912
 ID= option, ITEM statement (PMENU) 752
 ID statement
 COMPARE procedure 234
 MEANS procedure 639
 PRINT procedure 792
 TIMEPLOT procedure 1252
 TRANSPOSE procedure 1275
 UNIVARIATE procedure 1353
 IDLABEL statement, TRANSPOSE procedure 1276
 IDMIN option, PROC MEANS statement 629
 IMPORT= option, PROC REGISTRY statement 851
 IMPORT procedure 611
 data source statements 613, 615
 delimited files 614, 617
 examples 617
 Excel spreadsheets 620
 input data sources 613
 Microsoft Access tables 616, 621
 PC files 614
 PROC IMPORT statement 612
 spreadsheets 614, 620
 syntax 612
 importing
 transport files 211
 importing data 611
 delimited files 614, 617
 Excel spreadsheets 620
 Microsoft Access tables 616, 621
 PC files 614
 spreadsheets 614, 620
 to SAS Registry 854
 IN condition component 1067
 IN= option
 COPY statement (CATALOG) 161
 COPY statement (DATASETS) 351
 in-line views 1050, 1121
 INDENT= option
 LINE statement (FORMS) 489
 PROC FORMS statement 485
 TABLE statement (TABULATE) 1175
 INDEX CENTILES statement, DATASETS procedure 363
 INDEX CREATE statement, DATASETS procedure 363
 INDEX DELETE statement, DATASETS procedure 365
 INDEX= option
 COPY statement (DATASETS) 351
 PROC CPRT statement 317
 indexes
 and changes to data sets 364
 appending indexed data sets 341
 centiles information for indexed variables 363
 composite indexes 1034
 creating 330, 363
 deleting 330, 365, 1041
 in SQL procedure 1034
 managing 1034
 on altered columns 1032
 on columns 1034
 simple indexes 1034
 UNIQUE keyword 1034
 INFIL= option
 PROC CIMPORT statement 213
 INFONT= option, HISTOGRAM statement (UNIVARIATE) 1345
 INFORMAT statement, DATASETS procedure 366
 informats 366, 434
See also FORMAT procedure
 associating with variables 455
 creating 433
 for columns 1060
 for raw data values 438, 468
 permanent 457
 printing catalog contents containing informats 433
 printing information about 473
 storing 456
 storing descriptions of 433
 temporary 457
 user-defined 433
 INHEIGHT= option, HISTOGRAM statement (UNIVARIATE) 1345
 INITIATE argument, AUDIT statement (DATASETS) 344
 inner joins 1069
 INOBS= option, PROC SQL statement 1029
 input data sets 18
 input files, procedure output as 829
 INSERT statement, SQL procedure 1043
 INSET statement, UNIVARIATE procedure 1353
 insets 1353
 positioning in margins 1359
 positioning with compass point 1359
 positioning with coordinates 1360
 integrity constraints 330
 appending data sets and 343
 creating 360
 deleting 362
 reactivating 362
 interquartile range 1403, 1472
 INTERSECT operator 1080
 INTERTILE= option
 HISTOGRAM statement (UNIVARIATE) 1345
 PROBPLOT statement (UNIVARIATE) 1370
 QQPLOT statement (UNIVARIATE) 1381

INTERVAL= option, PROC CALENDAR statement 97
 INTO clause, SQL procedure 1046
 INVALUE statement, FORMAT procedure 438
 INVERSE statement, TRANTAB procedure 1297
 IS condition component 1067
 ITEM statement, PMENU procedure 751
 ITEMHELP= option, DEFINE statement (REPORT) 912

J

joined-table component 1068
 JOINREF option, PLOT statement (TIME-PLOT) 1255
 Jonckheere-Terpstra test 549
 JT option, TABLES statement (FREQ) 519
 JUST option, INVALUE statement (FORMAT) 439
 JUST= style attribute 51

K

K= option, HISTOGRAM statement (UNIVARIATE) 1345
 kappa statistics
 equal kappa coefficients 556
 overall kappa coefficient 556
 simple kappa coefficient 552
 weighted kappa coefficient 554
 KEEPLEN option, OUTPUT statement (MEANS) 645
 Kendall correlation statistics 281
 Kendall's partial tau-b 273, 284
 Kendall's tau-b 273, 280, 290, 536
 KENDALL option, PROC CORR statement 280
 KERNEL option, HISTOGRAM statement (UNIVARIATE) 1346
 kernel density estimates 1410
 KEYLABEL statement, TABULATE procedure 1172
 KEYLEVEL= option, CLASS statement (UNIVARIATE) 1334
 KEYWORD statement, TABULATE procedure 1172
 keywords, for statistics 1458
 KILL option
 PROC CATALOG statement 158
 PROC DATASETS statement 336
 Kolmogorov-Smirnov EDF test 1398
 Kolmogorov-Smirnov statistic 1398
 kurtosis 1473
 KURTOSIS keyword 1460

L

L= option
 HISTOGRAM statement (UNIVARIATE) 1346

PROBPLOT statement (UNIVARIATE) 1371
 QQPLOT statement (UNIVARIATE) 1381
 LABEL= option
 MODIFY statement (DATASETS) 368
 PROC PRINTTO statement 820
 PROC TRANSPOSE statement 1272
 LABEL option, PROC PRINT statement 787
 LABEL statement 67
 DATASETS procedure 366
 labels
 for columns 1060
 labels, producing with FORMS procedure 481
 lambda asymmetric 541
 lambda symmetric 542
 LASTNAME option, LINE statement (FORMS) 489
 LCLM keyword 1465
 LEFT option, DEFINE statement (REPORT) 912
 LEGEND option, PROC CALENDAR statement 97
 LET option, PROC TRANSPOSE statement 1272
 LEVELS= option, CHART procedure 192
 LEVELS option, OUTPUT statement (MEANS) 645
 LGRID= option
 HISTOGRAM statement (UNIVARIATE) 1346
 PROBPLOT statement (UNIVARIATE) 1371
 LHREF= option
 HISTOGRAM statement (UNIVARIATE) 1346
 PROBPLOT statement (UNIVARIATE) 1371
 QQPLOT statement (UNIVARIATE) 1381
 LIBNAME statement
 embedding in views 1038
 for DBMS connections 1095
 LIBRARY= option
 PROC DATASETS statement 336
 PROC FORMAT statement 437
 librefs, and stored views 1038
 LIKE condition component 1074
 likelihood-ratio chi-square test 531
 LINE statement
 FORMS procedure 488
 REPORT procedure 917
 LINES= option, PROC FORMS statement 485
 links, ODS 30
 LIST option
 PLOT statement (PLOT) 704
 PROC REGISTRY statement 851
 PROC REPORT statement 885
 TABLES statement (FREQ) 519
 LIST statement, TRANTAB procedure 1298
 LISTALL option, PROC COMPARE statement 228
 LISTBASE option, PROC COMPARE statement 228
 LISTBASEOBS option, PROC COMPARE statement 229
 LISTBASEVAR option, PROC COMPARE statement 229
 LISTCOMP option, PROC COMPARE statement 229
 LISTCOMPOBS option, PROC COMPARE statement 229
 LISTCOMPVAR option, PROC COMPARE statement 229
 LISTEQUALVAR option, PROC COMPARE statement 229
 LISTHELP option, PROC REGISTRY statement 851
 Listing output, ODS 20
 LISTOBS option, PROC COMPARE statement 229
 LISTUSER option, PROC REGISTRY statement 851
 LISTVAR option, PROC COMPARE statement 229
 listwise deletion 297
 LOAD REPORT window, REPORT procedure 936
 LOAD statement, TRANTAB procedure 1298
 LOCATION= option, PROC UNIVARIATE statement 1329
 LOCCOUNT option, PROC UNIVARIATE statement 1328
 LOG option, AUDIT statement (DATASETS) 344
 LOG= option, PROC PRINTTO statement 821
 logit odds ratio, adjusted 561
 lognormal distribution 1408, 1413
 LOGNORMAL option
 HISTOGRAM statement (UNIVARIATE) 1346
 PROBPLOT statement (UNIVARIATE) 1371
 QQPLOT statement (UNIVARIATE) 1381
 LONG option, PROC OPTIONS statement 687
 LOOPS= option, PROC SQL statement 1029
 LPI= option, PROC CHART statement 184
 LS= option, PROC REPORT statement 885
 LVREF= option
 HISTOGRAM statement (UNIVARIATE) 1347
 PROBPLOT statement (UNIVARIATE) 1371
 QQPLOT statement (UNIVARIATE) 1382

M

macro return codes 240
 macro variables, set by SQL procedure 1096
 MAD (median absolute deviation) 1403
 mailing labels 481, 491
 Mantel-Haenszel adjusted odds ratio 560
 Mantel-Haenszel chi-square test 531

matching observations 222
 matching variables 222
 MAX keyword 1461
 MAX= option
 INVALUE statement (FORMAT) 439, 454
 PICTURE statement (FORMAT) 442, 454
 VALUE statement (FORMAT) 451, 454
 MAXDEC= option
 PROC MEANS statement 630
 PROC TIMEPLOT statement 1250
 maximum value 1461
 MAXITER= option, TABLES statement
 (FREQ) 519
 MAXLABLEN= option, PROC FORMAT state-
 ment 437
 MAXNBIN= option, HISTOGRAM statement
 (UNIVARIATE) 1347
 MAXPRINT= option, PROC COMPARE state-
 ment 229
 MAXSELEN= option, PROC FORMAT state-
 ment 437
 MAXSIGMAS= option, HISTOGRAM statement
 (UNIVARIATE) 1347
 MAXTIME= option, EXACT statement
 (FREQ) 509
 MC option, EXACT statement (FREQ) 509
 McNemar's test 552
 mean 1467, 1468
 MEAN keyword 1461
 MEAN option
 CHART procedure 192
 MEAN= option, PROC STANDARD state-
 ment 1139
 MEAN statement, CALENDAR procedure 105
 MEANS procedure 624
 analysis variables 647
 BY statement 634, 638
 CLASS statement 635
 class variables 649
 class variables, combinations of 646, 648
 class variables, ordering 649
 class variables, specifying 635
 column width of output 654
 computational resources 638, 650
 concepts 649
 confidence limits 652
 examples 657
 FREQ statement 639
 frequency of observations 639
 ID statement 639
 ID variables 639
 missing values 638, 654
 N Obs statistic 655
 output data set 639, 640, 655
 OUTPUT statement 640
 PROC MEANS statement 627
 quantiles 653
 results 654
 statistic keywords 632, 640
 statistical computations 652
 Student's t test 653
 syntax 626
 task tables 626, 627
 TYPES statement 646
 VAR statement 647
 WAYS statement 648
 WEIGHT statement 648
 weighting observations 648
 MEANTYPE= option, PROC CALENDAR state-
 ment 97
 measures of agreement 523, 551
 measures of association 523, 533
 measures of association, nonparametric 273
 measures of location 1468
 measures of shape 1473
 measures of variability 1471
 MEASURES option, TABLES statement
 (FREQ) 519
 median 1468
 median absolute deviation (MAD) 1403
 MEDIAN keyword 1463
 MEMOSIZE= statement, IMPORT proce-
 dure 615
 MEMTYPE= option
 AGE statement (DATASETS) 337
 CHANGE statement (DATASETS) 346
 CONTENTS statement (DATASETS) 348
 COPY statement (DATASETS) 351
 DELETE statement (DATASETS) 354
 EXCHANGE statement (DATASETS) 358
 EXCLUDE statement (CIMPORT) 215
 EXCLUDE statement (CPORT) 319
 EXCLUDE statement (DATASETS) 359
 MODIFY statement (DATASETS) 368
 PROC CIMPORT statement 214
 PROC CPOR statement 317
 PROC DATASETS statement 336
 REPAIR statement (DATASETS) 372
 SAVE statement (DATASETS) 373
 SELECT statement (CIMPORT) 216
 SELECT statement (CPORT) 320
 SELECT statement (DATASETS) 374
 menu bar items 751, 753
 menu bars 745
 for FSEDIT applications 762
 MENU= option, ITEM statement (PMENU) 752
 MENU statement, PMENU procedure 754
 message characters 444
 MESSAGES window, REPORT procedure 936
 METHOD= option, PROC COMPARE state-
 ment 229
 Microsoft Access tables 427, 431, 616, 621
 MIDPERCENTS option, HISTOGRAM statement
 (UNIVARIATE) 1347
 MIDPOINTS= option
 HISTOGRAM statement (UNIVARI-
 ATE) 1347
 MIDPOINTS= option, CHART procedure 192
 MIN keyword 1461
 MIN= option
 INVALUE statement (FORMAT) 439, 454
 PICTURE statement (FORMAT) 442, 454
 VALUE statement (FORMAT) 451, 454
 minimum value 1461
 MISSING option
 CHART procedure 193
 CLASS statement (MEANS) 636
 CLASS statement (TABULATE) 1168
 CLASS statement (UNIVARIATE) 1335
 PROC CALENDAR statement 97
 PROC MEANS statement 630
 PROC PLOT statement 697
 PROC REPORT statement 885
 PROC TABULATE statement 1161
 TABLES statement (FREQ) 520
 missing values
 CHART procedure 193, 195
 CORR procedure 297
 FREQ procedure 567
 MEANS procedure 638, 654
 NMISS keyword 1461
 PLOT procedure 715, 733
 REPORT procedure 873, 986
 MISSPRINT option, TABLES statement
 (FREQ) 520
 MISSTEXT= option, TABLE statement (TABU-
 LATE) 1175
 MLF option, CLASS statement (MEANS) 636
 MLS option, CLASS statement (TABU-
 LATE) 1168
 MNEMONIC= option, ITEM statement
 (PMENU) 752
 mode 1468
 MODE keyword 1461
 MODES option, PROC UNIVARIATE state-
 ment 1329
 MODIFY statement
 CATALOG procedure 164
 DATASETS procedure 367
 Monte Carlo estimation 508, 566
 MOVE option
 COPY statement (CATALOG) 161
 COPY statement (DATASETS) 351
 MT= option, PROC CPOR statement 317
 MTTYPE= option
 AGE statement (DATASETS) 337
 CHANGE statement (DATASETS) 346
 CONTENTS statement (DATASETS) 348
 COPY statement (DATASETS) 351
 DELETE statement (DATASETS) 354
 EXCLUDE statement (CIMPORT) 215
 EXCLUDE statement (CPORT) 319
 EXCLUDE statement (DATASETS) 359
 MODIFY statement (DATASETS) 368
 PROC DATASETS statement 336
 REPAIR statement (DATASETS) 372
 SAVE statement (DATASETS) 373
 SELECT statement (CIMPORT) 216
 SELECT statement (CPORT) 320
 SELECT statement (DATASETS) 374

MU= option
 HISTOGRAM statement (UNIVARIATE) 1348
 PROBPLOT statement (UNIVARIATE) 1371
 QQPLOT statement (UNIVARIATE) 1382
 MU0= option, PROC UNIVARIATE statement 1329
 MULTILABEL option
 PICTURE statement (FORMAT) 442
 VALUE statement (FORMAT) 451
 MULTIPLIER= option, PICTURE statement (FORMAT) 443

N

N keyword 1461
 N Obs statistic 655
 N= option, EXACT statement (FREQ) 510
 N option, PROC PRINT statement 788
 NADJ= option
 PROBPLOT statement (UNIVARIATE) 1371
 QQPLOT statement (UNIVARIATE) 1382
 NAME= argument
 PROC DBCSTAB statement 407
 NAME= argument, TRANTAB statement (CPORT) 321
 NAME= option
 HISTOGRAM statement (UNIVARIATE) 1348
 PROBPLOT statement (UNIVARIATE) 1372
 PROC TRANSPOSE statement 1272
 QQPLOT statement (UNIVARIATE) 1382
 NAMED option, PROC REPORT statement 886
 NATIONAL option, PROC SORT statement 1009
 NCOLS= option
 HISTOGRAM statement (UNIVARIATE) 1348
 PROBPLOT statement (UNIVARIATE) 1372
 QQPLOT statement (UNIVARIATE) 1382
 NDOWN= option, PROC FORMS statement 485
 NEDIT option
 PROC CIMPORT statement 214
 PROC CPRT statement 317
 nested variables 1156
 NEW option
 COPY statement (CATALOG) 161
 PROC CIMPORT statement 214
 PROC PRINTTO statement 821
 APPEND statement (DATASETS) 340
 NEXTROBS= option, PROC UNIVARIATE statement 1329
 NEXTRVAL= option, PROC UNIVARIATE statement 1329
 NLS option
 LOAD statement (TRANTAB) 1298
 PROC TRANTAB statement 1298
 NMIS keyword 1461

NOALIAS option, PROC REPORT statement 886
 NOBARS option, HISTOGRAM statement (UNIVARIATE) 1348
 NOBORDER option, PROC FSLIST statement 608
 NOBREAKSPACE= style attribute 51
 NOBS keyword 1461
 NOBYLINE system option 792
 with BY statement (MEANS) 635
 NOBYPLOT option, PROC UNIVARIATE statement 1329
 NOCAPS option, PROC FSLIST statement 607
 NOCC option
 FSLIST command 610
 PROC FSLIST statement 607
 NOCENTER option, PROC REPORT statement 881
 NOCLONE option, COPY statement (DATASETS) 350
 NOCOL option, TABLES statement (FREQ) 520
 NOCOMPRESS option, PROC CPRT statement 317
 NOCONTINUED option, TABLE statement (TABULATE) 1175
 NOCORR option, PROC CORR statement 280
 NOCUM option, TABLES statement (FREQ) 520
 NODATE option, PROC COMPARE statement 230
 NODETAILS option
 CONTENTS statement (DATASETS) 348
 PROC DATASETS statement 335
 NODOUBLE option, PROC SQL statement 1028
 NODS option
 CONTENTS statement (DATASETS) 348
 NODUPKEY option, PROC SORT statement 1009
 NODUPDATES option, PROC SORT statement 1009
 NOEDIT option
 COPY statement (CATALOG) 161
 PICTURE statement (FORMAT) 443
 PROC CIMPORT statement 214
 PROC CPRT statement 317
 NOEQUALS option, PROC SORT statement 1008
 NOERRORSTOP option, PROC SQL statement 1028
 NOEXEC option
 PROC REPORT statement 886
 PROC SQL statement 1028
 NOFEEDBACK option, PROC SQL statement 1028
 NOFLOW option, PROC SQL statement 1029
 NOFRAME option
 HISTOGRAM statement (UNIVARIATE) 1348
 INSET statement (UNIVARIATE) 1358
 PROBPLOT statement (UNIVARIATE) 1372
 QQPLOT statement (UNIVARIATE) 1382
 NOFREQ option, TABLES statement (FREQ) 520
 NOHEADER option
 CHART procedure 193
 PROC REPORT statement 886
 NOHLABEL option, HISTOGRAM statement (UNIVARIATE) 1348
 NOHOST option, PROC OPTIONS statement 687
 NOINHERIT option, OUTPUT statement (MEANS) 645
 NOLEGEND option
 CHART procedure 193
 PROC PLOT statement 697
 NOLIST option, PROC DATASETS statement 336
 NOMISS option
 INDEX CREATE statement (DATASETS) 364
 PROC CORR statement 280
 PROC PLOT statement 697
 NOMISSBASE option, PROC COMPARE statement 230
 NOMISSCOMP option, PROC COMPARE statement 230
 NOMISSING option, PROC COMPARE statement 230
 NONE option, RBUTTON statement (PMENU) 756
 NONOBS option, PROC MEANS statement 630
 nonparametric measures of association 273
 NONUM option, PROC FSLIST statement 608
 NONNUMBER option, PROC SQL statement 1029
 NOOBS option, PROC PRINT statement 788
 NOOVP option
 FSLIST command 610
 PROC FSLIST statement 608
 NOPERCENT option, TABLES statement (FREQ) 520
 NOPLOT option, HISTOGRAM statement (UNIVARIATE) 1348
 NOPRINT option
 CONTENTS statement (DATASETS) 348
 DEFINE statement (REPORT) 913
 HISTOGRAM statement (UNIVARIATE) 1349
 PROC COMPARE statement 230
 PROC CORR statement 280
 PROC FREQ statement 506
 PROC MEANS statement 631
 PROC SQL statement 1030
 PROC SUMMARY statement 1150
 PROC UNIVARIATE statement 1329
 TABLES statement (FREQ) 520
 NOPROB option, PROC CORR statement 280

- NOPROMPT option, PROC SQL statement 1030
 NOREPLACE option, PROC FORMAT statement 437
 normal distribution 1409, 1413, 1467, 1474
 NORMAL option
 HISTOGRAM statement (UNIVARIATE) 1349
 PROBPLOT statement (UNIVARIATE) 1372
 PROC UNIVARIATE statement 1329
 QQPLOT statement (UNIVARIATE) 1382
 NORMAL= option, PROC RANK statement 836
 normal probability plots 1389, 1448
 NOROW option, TABLES statement (FREQ) 520
 NORWEIGIAN option, PROC SORT statement 1008
 NOSEPS option, PROC TABULATE statement 1162
 NOSIMPLE option, PROC CORR statement 280
 NOSORTMSG option, PROC SQL statement 1030
 NOSOURCE option, COPY statement (CATALOG) 161
 NOSRC option
 PROC CIMPORT statement 214
 PROC CPRT statement 318
 NOSTATS option, CHART procedure 193
 NOSTIMER option, PROC SQL statement 1030
 NOSUMMARY option, PROC COMPARE statement 230
 NOSYMBOL option, CHART procedure 193
 NOSYNAME option, PLOT statement (TIMEPLOT) 1256
 NOTE option, PROC COMPARE statement 230
 NOTRAP option
 PROC MEANS statement 630
 PROC TABULATE statement 1162
 NOTSORTED option
 BY statement 68
 BY statement (CALENDAR) 99
 BY statement (CHART) 186
 BY statement (COMPARE) 233
 BY statement (CORR) 283
 BY statement (FORMS) 487
 BY statement (FREQ) 507
 BY statement (MEANS) 635
 BY statement (PLOT) 698
 BY statement (PRINT) 792
 BY statement (RANK) 838
 BY statement (REPORT) 899
 BY statement (STANDARD) 1140
 BY statement (TABULATE) 1167
 BY statement (TIMEPLOT) 1251
 BY statement (UNIVARIATE) 1333
 ID statement (COMPARE) 234
 INVALUE statement (FORMAT) 439, 454
 PICTURE statement (FORMAT) 442, 454
 VALUE statement (FORMAT) 451, 454
 NOTSORTED option, BY statement (TRANSPOSE) 1273
 NOVALUES option, PROC COMPARE statement 230
 NOVLABEL option, HISTOGRAM statement (UNIVARIATE) 1349
 NOVTICK option, HISTOGRAM statement (UNIVARIATE) 1349
 NOWARN option, PROC DATASETS statement 336
 NOWINDOWS option, PROC REPORT statement 893
 NOZERO option, DEFINE statement (REPORT) 913
 NOZEROS option, CHART procedure 193
 NPLUS1 option, PROC RANK statement 836
 NPP option, PLOT statement (TIMEPLOT) 1256
 NROWS= option
 HISTOGRAM statement (UNIVARIATE) 1349
 PROBPLOT statement (UNIVARIATE) 1372
 QQPLOT statement (UNIVARIATE) 1383
 NSRC option
 PROC CIMPORT statement 214
 PROC CPRT statement 318
 null hypothesis 1486
 Null statement, EXPLODE procedure 419
 NUM option, PROC FSLIST statement 608
 NUMBER option, PROC SQL statement 1029
 numeric variables
 ranks for 833
 sorting orders for 1012
 numeric variables, distribution of 1318
 NWAY option, PROC MEANS statement 630
- O**
- OBS= option, PROC PRINT statement 788
 observations
 statistics for groups of 7
 observations
 appending to SAS data sets 83
 frequency of 71
 matching 222
 printing 783
 sorting 1005
 total number of 1461
 transposing variables into 1269
 odds ratio 546
 odds ratio, adjusted 560
 ODS (Output Delivery System) 19
 customizing output 31
 HTML output 21, 36
 links, storing in Results folder 30
 Listing output 20
 output data set, creating 28
 output objects, identifying 23
 output objects, selecting 26
 Printer output 20, 36
 style definitions 42
 OL option
 BREAK statement (REPORT) 895
 RBREAK statement (REPORT) 920
 ON option, CHECKBOX statement (PMENU) 748
 ONE option
 CLEAR statement (TRANTAB) 1297
 LIST statement (TRANTAB) 1298
 SAVE statement (TRANTAB) 1300
 one-tailed tests 1487
 operating environment-specific procedures 64, 1491
 OPT= option, TRANTAB statement (CPRT) 321
 OPTION= option, PROC OPTIONS statement 688
 example 689
 options listing 685
 OPTIONS procedure 685
 examples 685, 688
 format for display of settings 687
 groups, displaying options in 687
 host options listing 687
 overview 685
 portable options listing 687
 PROC OPTIONS statement 687
 results 688
 SAS log display 688
 setting of a single option (example) 689
 short descriptor of a system option 688
 short form of options listing 688
 syntax 687
 ORDER BY clause, SQL procedure 1054
 ORDER= option
 CLASS statement (MEANS) 637
 CLASS statement (TABULATE) 1168
 CLASS statement (UNIVARIATE) 1335
 DEFINE statement (REPORT) 913
 PROC FREQ statement 506
 PROC MEANS statement 630
 PROC TABULATE statement 1162
 ORDER option, DEFINE statement (REPORT) 913
 OUT= argument
 APPEND statement (DATASETS) 339
 COPY statement (DATASETS) 349
 PROC IMPORT statement 612
 OUT= option
 CONTENTS statement (CATALOG) 159
 CONTENTS statement (DATASETS) 348
 COPY statement (CATALOG) 160
 OUTPUT statement (FREQ) 511
 OUTPUT statement (MEANS) 640
 OUTPUT statement (UNIVARIATE) 1362
 PROC COMPARE statement 231, 248, 263
 PROC RANK statement 837
 PROC REPORT statement 886

- PROC SORT statement 1010
 PROC STANDARD statement 1139
 PROC TABULATE statement 1163
 PROC TRANSPOSE statement 1273
 TABLES statement (FREQ) 520
 OUT2= option
 CONTENTS statement (DATASETS) 349
 OUTALL option, PROC COMPARE statement 231
 OUTBASE option, PROC COMPARE statement 231
 OUTCOMP option, PROC COMPARE statement 231
 OUTDIF option, PROC COMPARE statement 231
 OUTDUR statement, CALENDAR procedure 106
 outer joins 1071, 1113
 OUTER UNION operator 1077
 OUTEXPECT option, TABLES statement (FREQ) 520
 OUTFILE= argument, PROC EXPORT statement 424
 OUTFIN statement, CALENDAR procedure 106
 OUTH= option, PROC CORR statement 281
 OUTHISTOGRAM= option, HISTOGRAM statement (UNIVARIATE) 1349
 OUTK= option, PROC CORR statement 281
 OUTLIB= option, PROC CPRT statement 318
 OUTNOEQUAL option, PROC COMPARE statement 231
 OUTOBS= option, PROC SQL statement 1030
 OUTP= option, PROC CORR statement 281
 OUTPCT option, TABLES statement (FREQ) 521
 OUTPERCENT option, PROC COMPARE statement 231
 output
 oversized text for printed output 415
 output data sets, ODS 28
 Output Delivery System
 See ODS (Output Delivery System)
 output objects, ODS
 identifying 23
 selecting 26
 OUTPUT= option
 CALID statement (CALENDAR) 100
 OUTPUT statement
 FREQ procedure 511, 571
 MEANS procedure 640
 UNIVARIATE procedure 1362, 1387
 OUTPUT window, printing from 876
 OUTPUTWIDTH= style attribute 51
 OUTREPT= option, PROC REPORT statement 887
 OUTS= option, PROC CORR statement 281
 OUTSTART statement, CALENDAR procedure 107
 OUTSTATS= option, PROC COMPARE statement 232, 249, 265
 OUTTABLE= argument, PROC EXPORT statement 424
 OUTTYPE= option, PROC CPRT statement 318
 OUTWARD= option, PLOT statement (PLOT) 704
 overall kappa coefficient 556
 OVERLAY option
 PLOT statement (PLOT) 704
 PLOT statement (TIMEPLOT) 1256
 OVP option
 FSLIST command 610
 PROC FSLIST statement 608
 OVPCHAR= option, PLOT statement (TIMEPLOT) 1256
- P**
- P keywords 1463
 p-values 565, 1489
 PACK option, LINE statement (FORMS) 489
 page dimension text 1156
 PAGE option
 BREAK statement (REPORT) 895
 DEFINE statement (REPORT) 914
 PROC FORMAT statement 437
 PROC FREQ statement 506
 RBREAK statement (REPORT) 920
 PAGEBY statement, PRINT procedure 793
 PAGESIZE= option, PROC FORMS statement 486
 paired data 1395, 1428
 PANELS= option, PROC REPORT statement 887
 parameters 1467
 PARMCARDS statement, EXPLODE procedure 416
 PARMCARDS4 statement, EXPLODE procedure 416
 partial correlation 291, 310
 PARTIAL statement, CORR procedure 284
 password-protected data sets, transporting 321
 passwords 330, 369
 appending password-protected data sets 341
 assigning 369
 changing 369
 copying password-protected files 352
 removing 370
 pattern matching 1074
 PC files, importing 614
 PCTLDEF= option
 PROC MEANS statement 632
 PROC UNIVARIATE statement 1330
 PCTLDEF= option, PROC TABULATE statement 1164
 PCTLMINOR option
 PROBPLOT statement (UNIVARIATE) 1372
 QQPLOT statement (UNIVARIATE) 1383
 PCTLORDER= option, PROBPLOT statement (UNIVARIATE) 1372
 PCTLSCALE option, QQPLOT statement (UNIVARIATE) 1383
 peakedness 1473
 Pearson correlation statistics 273, 280, 281, 538
 Pearson partial correlation 273, 284
 Pearson product-moment correlation 273, 281, 289, 300
 Pearson weighted product-moment correlation 273, 285
 PEARSON option, PROC CORR statement 281
 Pearson Type I or II distributions 1407
 PENALTIES= option, PLOT statement (PLOT) 705
 percent coefficient of variation 1460
 PERCENT option
 CHART procedure 193
 PROC RANK statement 837
 percentiles 1468
 calculating 1404
 from quantile-quantile plots 1386
 keywords and formulas 1463
 saving 1433
 PERCENTS= option, HISTOGRAM statement (UNIVARIATE) 1349
 permanent informats and formats 457, 474
 permanent SAS data sets 16
 PFILL= option, HISTOGRAM statement (UNIVARIATE) 1350
 phi coefficient 533
 picture formats 789, 441, 445, 463, 479
 PICTURE statement, FORMAT procedure 441
 picture-name formats 449
 pie charts 180
 PIE statement, CHART procedure 187
 PLACEMENT= option, PLOT statement (PLOT) 705
 PLCORR option, TABLES statement (FREQ) 521
 PLOT procedure 692
 BY statement 698
 collision states 713
 computational resources 714
 concepts 710
 contour plots 701, 725
 examples 716
 generating data with program statements 710
 hidden label characters 714
 hidden observations 715
 labeling plot points with variable values 711
 labeling points 693
 missing values 715, 733
 overlaid plots 692, 714, 719
 penalties 712, 741
 PLOT statement 699
 pointer symbols 711
 printed output 715
 PROC PLOT statement 695
 reference lines 714, 717

- results 715
 RUN groups 710
 scale of axes 715
 syntax 695
 task tables 695, 699
 variable combinations in plot requests 701
 variable lists in plot requests 700
- PLOT statement
 PLOT procedure 699
 TIMEPLOT procedure 1252
- PLOTS option, PROC UNIVARIATE statement 1330
- PLOTSIZE= option, PROC UNIVARIATE statement 1330
- plotting variables, over time intervals 1247
- PMENU procedure 745
 CHECKBOX statement 748
 commands for item selection 757
 concepts 759
 defining pull-down menus 754
 dialog boxes 758
 DIALOG statement 749
 ending 760
 examples 762
 execution of 759
- ITEM statement 751
 line between menu items 757
 menu bar items 751
 MENU statement 754
 PMENU catalog entries 747, 754, 760
- PROC PMENU statement 747
 pull-down items 751
 radio buttons 756
 RADIOBOX statement 755
 RBUTTON statement 756
 SELECTION statement 757
 SEPARATOR statement 757
 SUBMENU statement 758
 syntax 747
 task tables 747, 751
 templates for 760
 TEXT statement 758
- polychoric correlation 541
 populations 1466
 PORTABLE option, PROC OPTIONS statement 687
 portable options listing 687
- POS= option, PLOT statement (TIMEPLOT) 1256
- POSITION= option, INSET statement (UNIVARIATE) 1358
- posters 415
- POSTHTML= style attribute 52
 POSTIMAGE= style attribute 52
 POSTTEXT= style attribute 52
- power, of statistical tests 1487
 power-function distribution 1407
- PREFIX= option
 PICTURE statement (FORMAT) 444
 PROC TRANSPOSE statement 1273
- PREHTML= style attribute 52
 PREIMAGE= style attribute 52
 PRELOADFMT option
 CLASS statement (MEANS) 638
 CLASS statement (TABULATE) 1169
- PRETEXT= style attribute 52
- PRINT option
 PROC MEANS statement 631
 PROC SQL statement 1030
 PROC STANDARD statement 1139
 PROC SUMMARY statement 1150
- PRINT= option, PROC PRINTTO statement 821
- PRINT procedure 783
 BY statement 791
 column headings 797, 799
 column width 797
 examples 798
 ID statement 792
 identifying observations 792
 order of variables 795
 output 795
 page ejects 793
 page layout 795, 810, 813
 PAGEBY statement 793
 printing all data sets in a library 815
 PROC PRINT statement 786
 reports 783
 results 795
 selecting variables 795, 798
 SUM statement 794
 SUMBY statement 794
 summing numeric values 804, 806
 summing numeric variables 794
 sums, limiting number of 794, 808
 syntax 786
 task tables 786
 VAR statement 795
- PRINTALL option, PROC COMPARE statement 232
- PRINTALLTYPES option, PROC MEANS statement 631
- printer forms 481
 Printer output, ODS 20, 36
- PRINTIDVARS option, PROC MEANS statement 631
- printing
 all data sets in a library 815
 catalog contents, containing informats or formats 433
 informat and format information 473
 page ejects 793
 page layout 795, 810, 813
 reports 876
- PRINTKWT option, TABLES statement (FREQ) 521
- PRINTMISS option, TABLE statement (TABULATE) 1175
- PRINTTO procedure 819
 concepts 822
- examples 823
 page numbering 822
 printing from REPORT procedure 877
 PROC PRINTTO statement 820
 syntax 820
 task table 820
- probability function 1466
 probability plots 1365, 1391
 interpreting 1392
 theoretical distributions for 1411
- probability values 295, 1489
- PROBPLOT statement, UNIVARIATE procedure 1365
- PROBT keyword 1465
- PROC CALENDAR statement 93
 PROC CATALOG statement 157
 PROC CHART statement 183
 PROC CIMPORT statement 212
 PROC COMPARE statement 226
 PROC CONTENTS statement 268
 PROC CORR statement 278
 PROC CPRT statement 314
 PROC DATASETS statement 335, 378
 PROC DBCSTAB statement 407
 PROC DISPLAY statement 412
 PROC EXPLODE statement 416
 PROC EXPORT statement 424
 PROC FORMAT statement 436
 PROC FORMS statement 483
 PROC FREQ statement 504
 PROC FSLIST statement 606
 PROC IMPORT statement 612
 PROC MEANS statement 627
 PROC OPTIONS statement 687
 DEFINE= option (example) 689
 GROUP= option 687
 HOST option 687
 LONG option 687
 NOHOST option 687
 OPTION= option 688
 PORTABLE option 687
 SHORT option 687
 SHORT option (example) 688
- PROC PLOT statement 695
 PROC PMENU statement 747
 PROC PRINT statement 786
 PROC PRINTTO statement 820
 PROC RANK statement 835
 PROC REGISTRY statement 849
 PROC REPORT statement 879
 PROC SORT statement 1007
 PROC SQL statement 1027
 PROC SQL views 1023
 updating 1097
- PROC STANDARD statement 1138
 PROC SUMMARY statement 1150
 PROC TABULATE statement 1158
 PROC TIMEPLOT statement 1250
 PROC TRANSPOSE statement 1272
 PROC TRANTAB statement 1296
 PROC UNIVARIATE statement 1325

procedures
 choosing 3
 descriptions of 9
 functional categories of 3
 report-writing procedures 3, 4
 statistical procedures 3, 5
 utility procedures 4, 7
PROFILE= option, PROC REPORT statement 888
PROFILE window, REPORT procedure 936
PROMPT option
 PROC REPORT statement 888
 PROC SQL statement 1030
PROMPTER window, REPORT procedure 937
PROTECTSPECIALCHARACTERS= style attribute 52
PS= option
 PROC REPORT statement 889
PS= option, PROC FORMS statement 486
PSPACE= option, PROC REPORT statement 889
PULLDOWN menus
See PMENU procedure
 push buttons 750
PW= option
 MODIFY statement (DATASETS) 368
 PROC DATASETS statement 337
PWD= statement
 EXPORT procedure 426
 IMPORT procedure 616

Q

Q keywords 1463
QMMARKERS= option
 PROC MEANS statement 631
 PROC TABULATE statement 1163
QMETHOD= option
 PROC MEANS statement 632
 PROC TABULATE statement 1163
QNTLDEF= option
 PROC MEANS statement 632
 PROC TABULATE statement 1164
QQPLOT statement, UNIVARIATE procedure 1376
QRANGE keyword 1463
 quantile-quantile plots 1376, 1391
 interpreting 1392
 percentiles of 1386
 theoretical distributions for 1411
 quantiles
 confidence limits for 1404
 efficiency issues 7
 histograms and 1417
 MEANS procedure 624, 653
 weighted 1405
 query expressions 1076, 1083
 creating tables from 1036
 creating views from 1037

validating syntax 1056
 query-expression component 1075
QUIT statement 67, 72
 procedures supporting 72

R

radio boxes 755
 radio buttons 750, 756
RADIOBOX statement, PMENU procedure 755
 range 1472
RANGE keyword 1462
RANGE= statement, IMPORT procedure 615
 ranges, and FORMAT procedure 454, 476
RANK option, PROC CORR statement 281
RANK procedure 833
 BY statement 838
 computer resources 839
 concepts 839
 examples 840
 input variables 839
 missing values 840
 output data set 840
 PROC RANK statement 835
RANKS statement 838
 results 840
 statistical applications 839
 syntax 835
 task table 835
VAR statement 839
 variables for rank values 838

RANKADJ= option
 PROBPLOT statement (UNIVARIATE) 1372
 QQPLOT statement (UNIVARIATE) 1383
 ranks 833
RANKS statement, RANK procedure 838
 raw data 525
 raw data, informats for 438, 468
RBREAK statement, REPORT procedure 919
RBUTTON statement, PMENU procedure 756
READ= option
 MODIFY statement (DATASETS) 368
 PROC DATASETS statement 337
REF= option
 CHART procedure 193
 PLOT statement (TIMEPLOT) 1256
REFCHAR= option, PLOT statement (TIMEPLOT) 1256
REFPOINT= option, INSET statement (UNIVARIATE) 1358
REFRESH option, INDEX CENTILES statement (DATASETS) 363
 registry files
 creating 852
 key names 852
 values for keys 853
REGISTRY procedure 849
 comparing SAS Registry to external file 856
 creating registry files 852
 examples 854
 exporting the SAS Registry 855
 importing files to SAS Registry 854
 listing the SAS Registry 855
PROC REGISTRY statement 849
 registry entries 854
 syntax 849
 task table 849
 relative risk estimates 560
 relative risks 547, 562
 reliability estimation 273
RELRISK option, TABLES statement (FREQ) 521
 remerging data 1090
 Remote Library Services (RLS), with translation tables 1294
REMOVE option, LINE statement (FORMS) 489
RENAME statement, DATASETS procedure 371
REPAIR statement, DATASETS procedure 371
REPLACE option
 PROC EXPORT statement 425
 PROC IMPORT statement 613
 PROC STANDARD statement 1139
REPLACE statement, TRANTAB procedure 1299
REPORT= option, PROC REPORT statement 889
REPORT procedure 861
See also REPORT procedure windows
 across variables 868
 aliases 964
 analysis variables 868
 break lines 874, 898, 922
BREAK statement 894
 building reports 946
 BY statement 898
 CALL DEFINE statement 899
 column arrangement 903
 column attributes 899
 column for each variable value 970
COLUMN statement 903
 compound names 947
 compute blocks 871, 905
COMPUTE statement 905
 computed variables 869, 991
 concepts 866
 DATA step variables 946, 952
 dates in reports 869
DEFINE statement 908
 display variables 867
ENDCOMP statement 916
 ending program statements 916
 examples 958
 formatting characters 882
FREQ statement 917
 group variables 868
 groups 948, 994
 header arrangement 903
 layout of reports 866

- LINE statement 917
missing values 873, 986
order variables 867
output data set 989
panels 977
percentage calculation 983
printing reports 876
PROC REPORT statement 879
RBREAK statement 919
report definitions 877, 975
report items 908
report types 861
report variables 946
rows 961, 967
sample reports 861
statistics 871, 973
style elements 875, 996, 999
summaries 948
summaries, customized 917, 979
summaries, placement 894, 919
summary lines 947
syntax 878
task tables 878, 879, 894, 908, 919
variables, in reports 867
variables, position and usage 869
variables, selecting 958
WEIGHT statement 923
weighting analysis variables 923
REPORT procedure windows 923
 BREAK 923
 COMPUTE 927
 COMPUTED VAR 927
 DATA COLUMNS 928
 DATA SELECTION 928
 DEFINITION 929
 DISPLAY PAGE 934
 EXPLORE 934
 FORMATS 935
 LOAD REPORT 936
 MESSAGES 936
 PROFILE 936
 PROMPTER 937
 REPORT 938
 ROPTIONS 938
 SAVE DATA SET 943
 SAVE DEFINITION 943
 SOURCE 944
 STATISTICS 944
 WHERE 945
 WHERE ALSO 945
report variables 946
REPORT window 938
 printing from 876
report-writing procedures 3, 4
reports
See also REPORT procedure
building 946
detail reports 861
printing 876
stub-and-banner reports 1233
 summary reports 861
RESET statement, SQL procedure 1044
Results folder, ODS 30
RESUME option, AUDIT statement
 (DATASETS) 344
REVERSE option
 PLOT statement (TIMEPLOT) 1257
 PROC SORT statement 1010
RIGHT option, DEFINE statement (REPORT) 914
risk differences 545
RISKDIFF option, TABLES statement
 (FREQ) 521
risks 545
RLS (Remote Library Services), with translation
 tables 1294
robust estimators 1401, 1424
robust measures of scale 1403
ROBUSTSCALE option, PROC UNIVARIATE
 statement 1330
ROPTIONS window, REPORT procedure 938
ROUND option
 PICTURE statement (FORMAT) 444
 PROC PRINT statement 788
ROUND= option, PROC UNIVARIATE state-
 ment 1330
row mean scores statistic 559
ROW= option, TABLE statement (TABU-
 LATE) 1175
rows 1023
ROWS= option, PROC PRINT statement 789
RTINCLUDE option, HISTOGRAM statement
 (UNIVARIATE) 1350
RTSPACE= option, TABLE statement (TABU-
 LATE) 1176
RULES= style attribute 53
RUN-group processing 53
- ## S
- S= option, PLOT statement (PLOT) 708
samples 1467
sampling distribution 1476
SAS/ACCESS views 1023
 updating 1097
SAS/AF applications, executing 411
SAS catalogs
 concatenation 169
 copying entries 160, 165
 deleting entries 158, 162, 165
 descriptions of entries, changing 164
 excluding entries for copying 163
 listing contents of 159
 managing entries 155
 printing contents, catalogs containing informats
 or formats 433
 renaming entries 159
 repairing 371
 routing output or log to catalog entries 826
 storing informats and formats 456
 switching names of two entries 162
 writing to transport files 313
SAS data libraries
 copying entire library 351
 copying files 349
 deleting files 354, 373
 exchanging file names 357
 listing files in 330
 printing directories of 267, 347
 processing all data sets 64
 renaming files 345
 USER data library 16
 writing to transport files 313
SAS data sets
 appending 330, 339
 appending observations to 83
 attribute listings 330
 base data set 222
 comparing 221
 comparison data set 222
 compressed, appending to 341
 content descriptions 347
 contents of 267
 creating informats and formats 433, 470
 data set options 17
 exporting data 423
 importing data 611
 indexed, appending to 341
 indexes 330, 363
 input data sets 18
 integrity constraints 330
 modifying attributes 330
 modifying variables 330
 password-protected, appending 341
 password-protected, transporting 321
 permanent 16
 printing all data sets in a library 815
 processing all data sets in a library 64
 renaming variables 371
 repairing 371
 standardizing variables 1135
 storing informat or format descriptions 433
 temporary 16
 transporting between hosts 270
 writing to transport files 313
SAS data views 1023
SAS files
 aging 337
 changing attributes of 367
 converting 211, 313
 copying 269, 330, 349, 358, 374
 deleting 330, 354, 373
 exchanging names 357
 exporting 313
 listing 330
 managing 330
 moving among environments 313
 passwords 330
 renaming 330, 345

renaming groups of 337
repairing 330
SAS/GRAFH software, translation tables in 1294
SAS libraries
 printing all data sets 815
SAS log
 default destinations 819
 destinations for 819
 displaying SQL definitions 1040
 options list in 685
 routing to external files 823
 routing to SAS catalog entries 826
 system options list in 688
SAS procedure output
 as input file 829
 default destinations 819
 destinations for 819
 page numbering 822
 routing to external files 823
 routing to SAS catalog entries 826
SAS Registry 849
 See REGISTRY procedure
SAS system options 17, 685
 changing settings 685
 host options listing 687
 list of current settings 685
 portable options listing 687
SASHHELP views 1065
SAVAGE option, PROC RANK statement 837
SAVE DATA SET window, REPORT procedure 943
SAVE DEFINITION window, REPORT procedure 943
SAVE statement
 CATALOG procedure 165
 DATASETS procedure 373
 TRANTAB procedure 1300
SCALE= option
 HISTOGRAM statement (UNIVARIATE) 1350
 PROBPLOT statement (UNIVARIATE) 1373
 QQPLOT statement (UNIVARIATE) 1383
schedule calendars 87, 88, 109
schematic plots 1439
scores 528
SCORES= option, TABLES statement (FREQ) 521
SCOROUT option, TABLES statement (FREQ) 522
SEED= option, EXACT statement (FREQ) 510
SELECT clause, SQL procedure 1045
SELECT statement
 CATALOG procedure 165
 CIMPORT procedure 216
 CPORT procedure 320
 DATASETS procedure 374
 FORMAT procedure 450
 SQL procedure 1045
SELECT statement, SQL procedure
 asterisk (*) notation 1046
 SELECTION= option, ITEM statement (PMENU) 752
 SELECTION statement, PMENU procedure 757
 SEPARATOR statement, PMENU procedure 757
 set operators 1076
 SET statement 340
 SETS= option, PROC FORMS statement 486
 SHAPE= option
 HISTOGRAM statement (UNIVARIATE) 1350
 PROBPLOT statement (UNIVARIATE) 1373
 QQPLOT statement (UNIVARIATE) 1383
 Shapiro-Wilk statistic 1397
 SHEET= statement, IMPORT procedure 615
 SHORT option
 CONTENTS statement (DATASETS) 349
 SHORT option, PROC OPTIONS statement 687
 example 688
 SHOWALL option, PROC REPORT statement 889
 SIGMA= option
 HISTOGRAM statement (UNIVARIATE) 1350
 PROBPLOT statement (UNIVARIATE) 1373
 QQPLOT statement (UNIVARIATE) 1383
 sign test 1395, 1428
 simple indexes 1034
 simple kappa coefficient 552
 simple random sample 1467
 SINGULAR= option, PROC CORR statement 281
 singularity of variables 281
 skewness 1473
 SKEWNESS keyword 1462
 SKIP option
 BREAK statement (REPORT) 896
 RBREAK statement (REPORT) 920
 SKIP= option, PROC FORMS statement 486
 SLIST= option, PLOT statement (PLOT) 709
 SLOPE= option
 PROBPLOT statement (UNIVARIATE) 1373
 QQPLOT statement (UNIVARIATE) 1384
 Somers' D 537
 SORT procedure 1005
 ASCII order 1013
 BY groups, displaying first observation of 1018
 BY statement 1012
 character variables, sorting orders for 1012
 concepts 1012
 EBCDIC order 1012
 examples 1014
 integrity constraints 1014
 numeric variables, sorting orders for 1012
 output 1014
 output data set 1014
 PROC SORT statement 1007
 results 1014
 reversing order of sorted values 1016
 sorting by multiple variable values 1015
 stored sort information 1013
 syntax 1007
 task table 1007
 translation tables in 1293
 variables specification 1012
 SORTEDBY= option, MODIFY statement (DATASETS) 368
 sorting
 data retrieved by views 1037
 translation tables for 1311
 sorting observations 1005
 SORTMSG option, PROC SQL statement 1030
 SORTSEQ= option
 PROC SORT statement 1010
 PROC SQL statement 1030
 SORTSIZE= option, PROC SORT statement 1011
 SOUNDS-LIKE operator 1122
 SOURCE window, REPORT procedure 944
 SPACE= option, CHART procedure 193
 SPACING= option
 DEFINE statement (REPORT) 914
 PROC REPORT statement 889
 SPARSE option, TABLES statement (FREQ) 522
 Spearman correlation statistics 281, 539
 Spearman partial correlation 273, 284
 Spearman rank-order correlation 273, 290, 300
 SPEARMAN option, PROC CORR statement 281
 SPLIT= option
 PLOT statement (PLOT) 709
 PROC PRINT statement 790
 PROC REPORT statement 889
 spread of values 1471
 spreadsheets, importing 614, 620
 SQL components 1056
 BETWEEN condition 1057
 CALCULATED 1057
 CASE expression 1058
 column-definition 1059
 column-modifier 1060
 column-name 1061
 CONNECTION TO 1062
 CONTAINS condition 1062
 DICTIONARY tables 1063, 1111
 EXISTS condition 1066
 IN condition 1067
 IS condition 1067
 joined-table 1068
 LIKE condition 1074
 query-expression 1075
 sql-expression 1081
 summary-function 1088
 table-expression 1094
 SQL procedure 1022
 See also SQL components

- See also* tables
- ALTER TABLE statement 1031
 altering tables 1031
 ANSI Standard and 1098
 coding conventions 1024
 components 1056
 concepts 1094
 CONNECT statement 1033
 CREATE INDEX statement 1034
 CREATE TABLE statement 1035
 CREATE VIEW statement 1037
 data set options with 1094
 DBMS connections 1033, 1041, 1095
 definitions, displaying in SAS log 1040
 DELETE statement 1039
 DESCRIBE statement 1040
 DISCONNECT statement 1041
 DROP statement 1041
 examples 1101
 EXECUTE statement 1042
 FROM clause 1050
 functions supported by 1081
 GROUP BY clause 1052
 HAVING clause 1053
 indexes 1034, 1041
 INSERT statement 1043
 INTO clause 1046
 macro variables set by 1096
 missing values 1067, 1131
 ORDER BY clause 1054
 PROC SQL statement 1027
 query expressions, validating syntax 1056
 RESET statement 1044
 resetting options 1044
 rows, adding to tables or views 1043
 rows, deleting 1039
 SELECT clause 1045
 SELECT statement 1045
 sending statements to DBMS 1042
 syntax 1024
 tables 1023, 1035, 1041
 task tables 1026, 1027
 UPDATE statement 1055
 updating column values 1055
 VALIDATE statement 1056
 views 1023, 1037, 1041, 1097
 WHERE clause 1051
- SQL Procedure Pass-Through Facility 1095
 return codes 1095
 sql-expression component 1081
- SQUARE option
 PROBPLOT statement (UNIVARIATE) 1374
 QQPLOT statement (UNIVARIATE) 1384
- SSCP option, PROC CORR statement 282
 standard deviation 282, 1462, 1472
 standard error of the mean 1462, 1477
- STANDARD procedure 1135
 BY statement 1140
 examples 1143
 FREQ statement 1141
- frequency of observations 1141
 missing values 1142
 output data set 1143
 PROC STANDARD statement 1138
 results 1142
 statistical computations 1143
 syntax 1138
 task tables 1138
 VAR statement 1141
 variables, order of 1141
 variables, specifying 1141
 WEIGHT statement 1142
 weights for analysis variables 1142
 standardized variables 1135
 star charts 181
 STAR statement, CHART procedure 188
 START statement, CALENDAR procedure 107
 STARTAT= option, PROC REGISTRY statement 852
 STATE= option, ITEM statement (PMENU) 753
 statements, with same function in multiple procedures 67
 STATES option, PLOT statement (PLOT) 709
 statistic option, DEFINE statement (REPORT) 914
 statistic, defined 1467
 statistical procedures 3, 5
 efficiency issues 7
 statistically significant 1487
 statistics 65, 1466
 computational requirements for 66
 descriptive statistics 65, 1149
 for groups of observations 7
 formulas for 1458
 in tabular format 1152
 keywords for 1458
 measures of location 1468
 measures of shape 1473
 measures of variability 1471
 normal distribution 1474
 percentiles 1468
 populations 1466
 samples 1467
 sampling distribution 1476
 summarization procedures 1466
 testing hypotheses 1485
 weights 1466
 statistics procedures 1457
- STATISTICS window, REPORT procedure 944
 STATS option, PROC COMPARE statement 232
 STD keyword 1462
 STD= option, PROC STANDARD statement 1139
 STDDEV keyword 1462
 STDERR keyword 1462
 STDMEAN keyword 1462
 stem-and-leaf plots 1389
 STIMER option, PROC SQL statement 1030
 Structured Query Language (SQL)
See SQL procedure
- Stuart's tau-c 536
 stub-and-banner reports 1233
 Student's t distribution 1487
 Student's t statistic 1465
 two-tailed p-value 1465
 Student's t test 653, 1395
 STYLE= attribute, CALL DEFINE statement (REPORT) 901
 style attributes 43, 47
 style definitions, ODS 42
 STYLE= option
 BREAK statement (REPORT) 896
 CLASS statement (TABULATE) 1170
 CLASSLEV statement (TABULATE) 1171
 COMPUTE statement (REPORT) 906
 DEFINE statement (REPORT) 915
 KEYWORD statement (TABULATE) 1172
 PROC REPORT statement 890
 PROC TABULATE statement 1164
 RBREAK statement (REPORT) 920
 TABLE statement (TABULATE) 1176
 VAR statement (TABULATE) 1180
 SUBGROUP= option, CHART procedure 193
 SUBMENU= option, ITEM statement (PMENU) 752
 SUBMENU statement, PMENU procedure 758
 subqueries 1083
 correlated 1086
 efficiency and 1087
 versus joins 1074
 subsetting data 78
 from DICTIONARY tables 1064
 in tables 1053
 SUBSTITUTE= option
 PROC PMENU statement 748
 RBUTTON statement (PMENU) 756
 subtables 1156
 SUM keyword 1462
 sum of squares, corrected 1460
 sum of squares, uncorrected 1463
 sum of the weights 1463
 SUM option
 CHART procedure 194
 SUM statement
 CALENDAR procedure 108
 PRINT procedure 794
 SUMBY statement, PRINT procedure 794
 summarization procedures, data requirements 1466
 SUMMARIZE option
 BREAK statement (REPORT) 897
 RBREAK statement (REPORT) 921
 summary calendars 90, 110, 115
 summary lines 861
 SUMMARY procedure 1149
 PROC SUMMARY statement 1150
 syntax 1150
 VAR statement 1151
 summary reports 861
 summary-function component 1088
 sums of squares and crossproducts 282

- SUMSIZE= option, PROC MEANS statement 633
 SUMVAR= option, CHART procedure 194
 SUMWGT keyword 1463
 SUPPRESS option, BREAK statement (REPORT) 897
 SUSPEND option, AUDIT statement (DATASETS) 344
 SWAP statement, TRANTAB procedure 1301
 SWEDISH option, PROC SORT statement 1008
 SYMBOL= option, CHART procedure 194
 SYSINFO return code 240
 system options listing 685
- T**
- T keyword 1465
 t test 624
 Student's t test 653
 TABLE= argument
 PROC IMPORT statement 612
 TABLE= argument, PROC DBCSTAB statement 407
 table expressions 1076
 TABLE= option
 SAVE statement (TRANTAB) 1300
 TABLE statement, TABULATE procedure 1173
 table-expression component 1094
 tables 1023
 adding columns 1031
 adding rows 1043, 1101
 aliases 1050, 1069
 column attributes 1031
 combining 1109
 counting rows 1089
 creating 1035, 1101
 creating indexes on columns 1034
 creating, from query expressions 1036
 creating, from query results 1103
 creating, without rows 1036
 deleting 1041
 deleting rows 1039
 dropping columns 1031
 indexes on altered columns 1032
 initial values of new columns 1032
 integrity constraints 1031, 1033, 1037
 joining 1068, 1107, 1113, 1119, 1124
 joins versus subqueries 1074
 order of rows 1054
 renaming columns 1032
 retrieving data from 1075
 subsetting grouped data 1053
 updating 1055, 1105
 TABLES statement, FREQ procedure 514
 output data set 570
 with EXACT statement 510
 with OUTPUT statement 511
 tabular reports, for statistics 1152
 TABULATE procedure 1152
 analysis variables 1180
 analysis variables, weights for 1181
 BY statement 1166
 BY-group processing 1183
 CLASS statement 1167
 class variables 1167
 class variables, combinations of 1201
 class variables, formatting 1182
 class variables, level value headings 1170
 class variables, with preloaded formats 1203
 CLASSEV statement 1170
 column headings 1210
 column percentages 1233
 concepts 1181
 denominator definitions 1233
 dimension expressions 1177
 examples 1199
 formats, multilabel 1208
 formats, preloaded 1203
 formatting characters 1160
 FREQ statement 1171
 frequency of observations 1171
 headings, order of 1198
 horizontal separators 1216
 KEYLABEL statement 1172
 keyword headings 1172
 keyword labels 1172
 KEYWORD statement 1172
 missing values 1189
 missing values, for class variables 1170
 page dimension 1183
 percentages, calculating 1184, 1230
 PROC TABULATE statement 1158
 reshaping data 1228
 results 1189
 row headings 1210, 1214, 1216
 row percentages 1233
 statistics available in 1181
 style elements 1188
 style elements, for HTML output 1243
 summarizing information 1212
 survey data, multi-response 1221
 survey data, multiple-choice 1224
 syntax 1157
 TABLE statement 1173
 tables, defining 1173
 tables, formatting values in 1183
 tables, multipage 1218
 tables, two-dimensional 1199
 task tables 1157, 1158, 1173
 terminology 1155
 VAR statement 1180
 WEIGHT statement 1181
 TAGATTR= style attribute 53
 TAGSORT option, PROC SORT statement 1011
 TAPE option
 PROC CIMPORT statement 214
 PROC CPOR statement 318
 temporary SAS data sets 16
 TEST statement
 FREQ procedure 523
 TESTF= option, TABLES statement (FREQ) 522
 TESTP= option, TABLES statement (FREQ) 522
 tests for location
 UNIVARIATE procedure 1394
 text fields 750
 TEXT statement, PMENU procedure 758
 THETA= option
 HISTOGRAM statement (UNIVARIATE) 1350
 PROBPLOT statement (UNIVARIATE) 1374
 QQPLOT statement (UNIVARIATE) 1384
 THRESHOLD= option
 HISTOGRAM statement (UNIVARIATE) 1351
 PROBPLOT statement (UNIVARIATE) 1374
 QQPLOT statement (UNIVARIATE) 1385
 TIES= option, PROC RANK statement 837
 TIMEPLOT procedure 1247
 BY statement 1251
 CLASS statement 1251
 class variables, grouping by 1251
 data considerations 1257
 examples 1258
 ID statement 1252
 missing values 1258
 output 1257
 page layout 1257
 PLOT statement 1252
 printing variable values 1252
 PROC TIMEPLOT statement 1250
 results 1257
 superimposing plots 1264
 symbol variables 1252
 syntax 1250
 task tables 1250, 1252
 titles, containing BY-group information 54
 TOTPCT option, TABLES statement (FREQ) 522
 TRANSLATE= option, PROC CPOR statement 318
 translation tables 1291
 character sets and 1292
 creating 1302
 device-to-operating environment translation 1294
 editing 1305, 1307, 1313
 exchanging 1301
 hexadecimal representation of 1298
 in SAS/GRAPH software 1294
 in SORT procedure 1293
 inverse tables 1297, 1309
 loading into memory for editing 1298
 modifying Institute-supplied tables 1293
 operating environment-to-device translation 1294
 outside TRANTAB procedure 1293
 positions 1291, 1292

- positions, setting to zero 1297
purposes of 1292
replacing characters in 1299
saving 1300
sorting data 1311
storing 1292
table one area 1294
table two area 1294
viewing 1301
with CIMPORT procedure 1293
with CPRT procedure 1293
with Remote Library Sservices (RLS) 1294
transport files 211
importing 211
moving between hosts 270
writing 313
transporting
password-protected data sets 321
SAS data sets 270
TRANSPOSE option, PROC COMPARE statement 232, 247
TRANSPOSE procedure 1269
attributes of transposed variables 1278
BY statement 1273
COPY statement 1275
copying variables without transposing 1275
duplicate ID values 1275
examples 1278
formatted ID values 1275
ID statement 1275
IDLABEL statement 1276
labeling transposed variables 1276
listing variables to transpose 1277
missing values 1276
naming transposed variables 1278
output data set 1277
PROC TRANSPOSE statement 1272
results 1277
syntax 1272
task table 1272
transposing BY groups 1274, 1282
transposing data for statistical analysis 1286
VAR statement 1277
variable names, from numeric values 1276
transposed variables 1269
TRANTAB procedure 1291
character sets 1292
CLEAR statement 1297
concepts 1292
examples 1301
exchanging tables 1301
hexadecimal tables 1298
INVERSE statement 1297
LIST statement 1298
LOAD statement 1298
loading tables into memory for editing 1298
modifying Institute-supplied translation tables 1293
positions, setting to zero 1297
PROC TRANTAB statement 1296
REPLACE statement 1299
replacing characters in tables 1299
SAVE statement 1300
saving tables 1300
storing translation tables 1292
SWAP statement 1301
syntax 1295
table two, creating 1297
task table 1295
translation tables, outside TRANTAB procedure 1293
TRANTAB statement, CPRT procedure 321
TRAP option, PROC TABULATE statement 1165
TREND option, TABLES statement (FREQ) 522
trimmed means 1402
TRIMMED= option, PROC UNIVARIATE statement 1331
TURNVLABELS option, HISTOGRAM statement (UNIVARIATE) 1351
TWO option
CLEAR statement (TRANTAB) 1297
LIST statement (TRANTAB) 1298
SAVE statement (TRANTAB) 1300
two-tailed tests 1487
Type I error rate 1487
Type II error rate 1487
TYPE= option
CHART procedure 194
MODIFY statement (DATASETS) 369
TRANTAB statement (CPRT) 321
TYPES statement, MEANS procedure 646
- ## U
- UCLM keyword 1465
UID= statement
EXPORT procedure 426
IMPORT procedure 616
UL option
BREAK statement (REPORT) 897
RBREAK statement (REPORT) 922
uncertainty coefficient asymmetric 542
uncertainty coefficient symmetric 543
uncorrected sum of squares 1463
UNDO_POLICY= option, PROC SQL statement 1030
UNIFORM option
PROC PLOT statement 697
PROC PRINT statement 790
PROC TIMEPLOT statement 1250
UNINSTALL= option, PROC REGISTRY statement 852
UNION operator 1078
UNIQUE keyword 1034
UNIQUE option, CREATE INDEX statement (DATASETS) 364
UNIT= argument, PROC FSLIST statement 607
UNIT= option, PROC PRINTTO statement 822
UNIVARIATE procedure 1318
analysis variables 1387
Anderson-Darling statistic 1399
box plots 1389, 1390
BY statement 1333, 1364
CLASS statement 1333
classification levels 1333
computer resources 1392
concepts 1388
confidence limits 1393
Cramer-von Mises statistic 1399
data distribution 1433
density curves 1444
EDF goodness-of-fit tests 1397, 1400
examples 1418
extreme observations 1353, 1422
fitted continuous distributions 1406
FREQ statement 1336
frequency of observations 1336
goodness-of-fit tests 1396
high-resolution graphics 1391
HISTOGRAM statement 1337
histograms 1416, 1450
ID statement 1353
INSET statement 1353
Kolmogorov-Smirnov statistic 1398
line printer plots 1389
location and scale parameters 1415
missing values 1416
mode calculation 1406
normal probability plots 1389, 1448
OUTHISTOGRAM= data set 1417
output data set 1362, 1417, 1437, 1439
OUTPUT statement 1362, 1387
paired data 1428
percentiles 1364, 1404, 1433
probability plots 1365, 1391, 1392, 1411
PROBPLOT statement 1365
PROC UNIVARIATE statement 1325
QQPLOT statement 1376
quantile-quantile plots 1376, 1391, 1392
results 1415
robust estimators 1401, 1424
robust measures of scale 1403
rounding 1388, 1422
schematic plots 1439
shape parameters 1414
Shapiro-Wilk statistic 1397
sign test 1395, 1428
statistical computations 1393
stem-and-leaf plots 1389
Student's t test 1395
summary statistics 1353
syntax 1325
task tables 1325, 1337, 1365, 1376
tests for location 1394
trimmed means 1402
VAR statement 1387
WEIGHT statement 1387

Wilcoxon signed rank test 1396
 Winsorized means 1401
 universe 1466
 UPCASE option, INVALUE statement (FORMAT) 439
 UPDATE statement, SQL procedure 1055
 UPDATECENTILES= option
 CREATE INDEX statement (DATASETS) 364
 INDEX CENTILES statement (DATASETS) 363
 URL= style attribute 53
 USER data library 16
 USER literal 1082
 USER_VAR= option, AUDIT statement (DATASETS) 344
 USESASHELP option, PROC REGISTRY statement 852
 USS keyword 1463
 utility procedures 4, 7

V

V5FMT option, TABLES statement (FREQ) 523
 VALIDATE statement, SQL procedure 1056
 VALUE statement, FORMAT procedure 450
 VAR keyword 1463
 VAR statement
 CALENDAR procedure 108
 COMPARE procedure 235
 CORR procedure 285
 MEANS procedure 647
 PRINT procedure 795
 RANK procedure 839
 STANDARD procedure 1141
 SUMMARY procedure 1151
 TABULATE procedure 1180
 TRANSPOSE procedure 1277
 UNIVARIATE procedure 1387
 VARDEF= option
 PROC CORR statement 282
 PROC MEANS statement 633
 PROC REPORT statement 892
 PROC STANDARD statement 1139
 PROC TABULATE statement 1165
 PROC UNIVARIATE statement 1331
 variability 1471
 variables
 associating informats and formats with 455
 attributes of 367
 comparing 221
 formatted values 59
 labels of 366
 matching 222
 modifying, within a data set 330
 nested 1156
 plotting over time intervals 1247
 renaming 371
 shortcuts for lists of variable names 58

standardizing 1135
 transposing into observations 1269
 variance 1463, 1472
 variances 282
 VARNUM option
 CONTENTS statement (DATASETS) 349
 VAXIS= option
 HISTOGRAM statement (UNIVARIATE) 1351
 VAXIS= option, PLOT statement (PLOT) 709
 VAXISLABEL= option, HISTOGRAM statement (UNIVARIATE) 1351
 VBAR statement, CHART procedure 189
 VERIFY option, PROC DBCSTAB statement 408
 VEXPAND option, PLOT statement (PLOT) 709
 views 1023
 adding rows 1043
 creating, from DICTIONARY tables 1064
 creating, from query expressions 1037
 creating, from query results 1116
 deleting 1041
 deleting rows 1039
 embedding LIBNAME statement in 1038
 in-line 1050, 1121
 librefs and stored views 1038
 SASHELP views 1065
 sorting data retrieved by 1037
 storing DBMS connection information 1038
 updating 1038, 1055, 1097
 VJUST= style attribute 53
 VMINOR= option
 HISTOGRAM statement (UNIVARIATE) 1351
 PROBPLOT statement (UNIVARIATE) 1374
 QQPLOT statement (UNIVARIATE) 1385
 VOFFSET= option, HISTOGRAM statement (UNIVARIATE) 1351
 VPERCENT= option, PROC PLOT statement 697
 VPOS= option, PLOT statement (PLOT) 709
 VREF= option
 HISTOGRAM statement (UNIVARIATE) 1351
 PROBPLOT statement (UNIVARIATE) 1374
 QQPLOT statement (UNIVARIATE) 1385
 VREF= option, PLOT statement (PLOT) 709
 VREFCHAR= option, PLOT statement (PLOT) 710
 VREFLABELS= option
 HISTOGRAM statement (UNIVARIATE) 1351
 PROBPLOT statement (UNIVARIATE) 1374
 QQPLOT statement (UNIVARIATE) 1385
 VREFLABPOS= option, HISTOGRAM statement (UNIVARIATE) 1351
 VREVERSE option, PLOT statement (PLOT) 710

VSCALE= option, HISTOGRAM statement (UNIVARIATE) 1351
 VSPACE= option, PLOT statement (PLOT) 710
 VTOH= option, PROC PLOT statement 697
 VZERO option, PLOT statement (PLOT) 710

W

W= option
 HISTOGRAM statement (UNIVARIATE) 1352
 PROBPLOT statement (UNIVARIATE) 1374
 QQPLOT statement (UNIVARIATE) 1385
 WARNING option, PROC COMPARE statement 232
 WAXIS= option, HISTOGRAM statement (UNIVARIATE) 1352
 WAYS option, OUTPUT statement (MEANS) 645
 WAYS statement, MEANS procedure 648
 WBARLINE= option, HISTOGRAM statement (UNIVARIATE) 1352
 WBUILD macro 772
 WEEKDAYS option, PROC CALENDAR statement 98
 Weibull distribution 1409
 three-parameter 1413
 two-parameter 1414
 WEIBULL option
 HISTOGRAM statement (UNIVARIATE) 1352
 PROBPLOT statement (UNIVARIATE) 1374
 QQPLOT statement (UNIVARIATE) 1385
 WEIBULL2 option
 PROBPLOT statement (UNIVARIATE) 1375
 QQPLOT statement (UNIVARIATE) 1385
 WEIGHT= option
 VAR statement (MEANS) 647
 VAR statement (TABULATE) 1180
 WEIGHT statement 68, 73
 calculating weighted statistics 74
 CORR procedure 285
 example 74
 FREQ procedure 524
 MEANS procedure 648
 procedures supporting 73
 REPORT procedure 923
 STANDARD procedure 1142
 TABULATE procedure 1181
 UNIVARIATE procedure 1387
 weighted kappa coefficient 554
 weighted quantiles 1405
 weighted statistics 74
 weights 1466
 weights for analysis variables 73
 WGDB= statement
 EXPORT procedure 427
 IMPORT procedure 616
 WGRID= option, HISTOGRAM statement (UNIVARIATE) 1352

WHERE ALSO window, REPORT procedure 945
 WHERE clause, SQL procedure 1051
 WHERE statement 68, 78
 example 78
 procedures supporting 78
 WHERE window, REPORT procedure 945
 WIDTH= option
 CHART procedure 195
 DEFINE statement (REPORT) 916
 PROC FORMS statement 486
 PROC PRINT statement 790

Wilcoxon signed rank test 1396
 WINDOWS option, PROC REPORT statement 893
 Winsorized means 1332, 1401
 WINSORIZED= option, PROC UNIVARIATE statement 1332
 WITH statement
 COMPARE procedure 236
 CORR procedure 286
 WORKDATA= option, PROC CALENDAR statement 98
 workdays data set 98, 117

WRAP option, PROC REPORT statement 893
 WRITE= option, MODIFY statement (DATASETS) 369

Z

ZETA= option
 HISTOGRAM statement (UNIVARIATE) 1352
 PROBPLOT statement (UNIVARIATE) 1375
 QQPLOT statement (UNIVARIATE) 1386