Royer Data Description

The files cited below are from a study of arithmetic learning in children (Royer, J.M.,
Tronsky, L.M., & Chan, Y. (1999, *Contemporary Educational Psychology*, *24*, 181-266).
The Royer Data file contains a subset of the variables obtained in that study as well as
some we have created from the original variables. The file contains scores for children in
grades 1 - 8. Other files described here have been constructed from the Royer file, and
include only some of the variables and, in some instances, have excluded some cases.

Royer Data
Variables: gender (Male, Female), grade (1, 2, ..., 8), subacc, subrt, multacc, multrt,
addacc, addrt, group, speedmrt, id. Sub, mult, and add refer to subtraction, multiplication,
and addition scores; acc is percent correct and rt is response time. Speedmrt is the speed
of multiplication response times (the reciprocal of multrt).
Group = 0 if grade = 1, 2, or 3; group = 1 if grade = 4 or 5; group = 2 if grade = 6, 7, or 8.

Royer_acc
Variables: id, gender, grade (3 - 8), addacc, multacc, subacc, acc_mean (average
of three accuracy scores).

Royer_rt
Includes the same variables as the *Royer_acc* file, except that the arithmetic measures
are response times.

Royer rt_speed data
Includes response times and speed.

Royer mult data
Includes multiplication accuracy and response time scores for a selected
group of third- to eighth-grade children. Other variables are id, gender, and
grade.