

NAME: Time of Birth, Sex, and Birth Weight of 44 Babies  
TYPE: Observational  
SIZE: 44 observations, 4 variables

DESCRIPTIVE ABSTRACT:

The dataset contains the time of birth, sex, and birth weight for each of 44 babies born in one 24-hour period at a Brisbane, Australia, hospital. Also included is the number of minutes since midnight for each birth.

SOURCE:

The data appeared in the Brisbane newspaper The Sunday Mail on December 21, 1997.

VARIABLE DESCRIPTIONS:

Columns

1 - 8 Time of birth recorded on the 24-hour clock  
9 - 16 Sex of the child (1 = girl, 2 = boy)  
17 - 24 Birth weight in grams  
25 - 32 Number of minutes after midnight of each birth

Values are aligned and delimited by blanks. There are no missing values.

STORY BEHIND THE DATA:

Forty-four babies -- a new record -- were born in one 24-hour period at the Mater Mothers' Hospital in Brisbane, Queensland, Australia, on December 18, 1997. For each of the 44 babies, The Sunday Mail recorded the time of birth, the sex of the child, and the birth weight in grams.

Additional information about these data can be found in the "Datasets and Stories" article "A Simple Dataset for Demonstrating Common Distributions" in the Journal of Statistics Education (Dunn 1999).

PEDAGOGICAL NOTES:

The data can be used to demonstrate fitting the binomial distribution (the number of boys/girls born out of 44 births), the geometric distribution (the number of births until a boy/girl is born), the Poisson distribution (births per hour for each hour), and the exponential distribution (times between births). The normal distribution is found to be unsuitable for modeling the birth weights, but better results are obtained when birth weights are separated by sex. The dataset can also be used to illustrate hypothesis tests about proportions, comparisons of birth weights by gender, the runs test of randomness of gender, and skewed data.

REFERENCE:

Steele, S. (December 21, 1997), "Babies by the Dozen for Christmas: 24-Hour Baby Boom," The Sunday Mail (Brisbane), p. 7.

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