

Fox Module 7 Advanced transformations

- Transforming non-constant spread
- Transforming proportions

Read Section 4.4, “Transforming non-constant spread,” on pages 63-66. For final exam problems, know the rules in the gray box on page 65 (positive and negative association).

Read Section 4.5, “Transforming proportions,” on pages 66-68. Know the logit function, both for transforming data and for GLMs. Know the table on page 67, and be sure you can transform a probability into its logit. Skip the equations for the probit and arc-sin transformations at the bottom on page 67; they are less commonly used. Skip Tukey’s folded powers and roots on page 68.

The last homework assignment in this course uses a logit transformation. Actuaries deal with probabilities in all practice areas, such as probabilities of renewal, ruin, death, illness, recovery, and accidents. You can apply logit transformations to much company work.