

1. (a) Yes, it is linear in the β 's with additive errors.
- (b) Yes, use linear regression using $\log(Y)$ as the response.
- (c) No. No transformation will make this linear in the β 's.
- (d) Yes. It can be expressed as the linear model $Y' = \log(1/Y - 1) = \beta_0 + \beta_1 X + e$.