

2^{kr} Factorial Designs

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These slides are available on-line at:

<http://www.cse.wustl.edu/~jain/cse567-06/>



- ❑ Computation of Effects
- ❑ Estimation of Experimental Errors
- ❑ Allocation of Variation
- ❑ Confidence Intervals for Effects
- ❑ Confidence Intervals for Predicted Responses
- ❑ Visual Tests for Verifying the assumptions
- ❑ Multiplicative Models

$2^k r$ Factorial Designs

- r replications of 2^k Experiments
⇒ $2^k r$ observations.
⇒ Allows estimation of experimental errors.

- Model:

$$y = q_0 + q_A x_A + q_B x_B + q_{AB} x_A x_B + e$$

- e = Experimental error