

# Homework Solutions

## Chapter 3 – Page 171

### Exercise 21

- (a) The batches of feedstock.
- (b) The response variable is the yield.
- (c) The explanatory variables are the temperature, with 2 levels, and the stirring rate, with 3 levels.
- (d) There are  $2 \times 3 = 6$  treatments.
- (e) There are 4 units per treatment, so there are  $4 \times 6 = 24$  units.
- (f) The design-layout table:

		Stirring rate		
		60 rpm	100 rpm	140 rpm
Temperature	50 deg	4 batches	4 batches	4 batches
	70 deg	4 batches	4 batches	4 batches