✓ 3.3.a

✓ 3.3.b As coarse length goes up, so do test scores. the effects are particularly the same for middle and upper class, but a strong interaction on lower class is detected, lower class have a stronger influence by hours in class.

√3.5   The results show the power of
8 replicates is equal to .998,
which is greater than .8 power for
detecting differences

√ 3.7.a $N = (8\sigma/\Delta)^2 \approx 14.258$, about 15 experiments needed

$N = \#$ of experiments

$\sigma = 236$ minutes

power $= .95$

$\Delta = .5$ minutes

Does it change for 3 factors?

√ 3.7.b Randomize the experiments:

** Compare results to tables
3 and 4 of the paper:
The only difference from the
tables and R out put are
the missing p-value column
indicating significance found inside of the R output.
is

How to calculate Std error given
in R? —

Interpret and explain significant effects?
table 3 shows all factors have significant
effect on boil time. table 4 results
show all factors are significant
at a 95% and above confidence interval,
except the interaction factors. Interaction
terms were not significant in explaining the
variation in boil times.