A1: Group _____ 01 _____ 6/12 → 3/6

1. Formatting:

0.75/ all margins 2.5cm   (informative title)

/0.75 12 pt size   member names on all pgs

no raw R code or output   all pages numbered

max **7** pages   no blurry plots (**NOT png**)

                                           - Don't need class name/
2. Introduction/Background: number / but
                                             p.1 could use
1/1   brief statement of scientific question ← Too verbose   more paragraphs

      all variables defined ── Too verbose

3. EDA:

0.75/   univariate numerical   bivariate numerical (cor)

        univariate graphical   bivariate graphical

0.25/   4. Model fitting: ← Write model mathematically before
    /2   fitting

        state how model fitted (ie, LS)

        CLEARLY describe how model selected

        define all terms → within/between; selection
                                                criteria

        Show ANOVA table - make sure explanatories are FACTORS,
        ie, correct df

0.5/2   5. Model assessment:

        CLEARLY state model assumptions: - assumptions are on
                                           the errors, not X's
          1. errors have mean 0
          2. errors are homoscedastic (same variance)
          3. errors are uncorrelated
          4. errors are normally distributed

SQUARE carry out assessment (graphics): + interpret
          qq normal plot of residuals,
          residuals vs. fitted

3.25/7.75

0.5/

estimated model doesn't have error term

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)   max **2 sig digits** on coefs

0.75/
1.25

7. Plots: *model not correctly specified,*
                                    you do not have enough terms

label size (not too small)   captions   *are you sure you*
                                          are treating the
placement   **NOT BLURRY**   *x's as FACTORS?*

0.5/
1

8. Conclusions

recap analysis   state main findings ✱ *interpretation*

9. Language quality:

poor   satisfactory   (good)   excellent

1/1

10. Other comments:

— Don't need reference to course (Intro)

— Put variable descriptions in table, the way
you have presented them is too diffuse (Sec 3.1)

— Analysis of variance — no quotes

— write hyps mathematically

— use *primary refs* for techniques (not refs 4/5)

— Results fig 1: indep vars not normal,
they are FACTORS

— interpret fitted model in Results section

2.75/4.25

✱ 'influences' / 'impact' etc — cannot
conclude causality, only 'association'

— Ha Ha Ha 😊

A1: Group __O2__   4.75/12 → [2.375/6]

1. Formatting:

0/0.75

(all margins 2.5cm)   (informative title)

12 pt size   (member names on all pgs)

(no raw R code or output)   all pages numbered

max 7 pages   no blurry plots (NOT png)
                              — too many digits
                                on error mean/
1/1   var

2. Introduction/Background:

brief statement of scientific question

all variables defined

0.75/2   3. EDA: Exploratory

(univariate numerical) freq,   bivariate numerical (cor)

univariate graphical   table   bivariate graphical

0.5/2   4. Model fitting:

(state how model fitted (ie, LS))   write mathematical
                                     model that you are fitting
CLEARLY describe how model selected — explain stepwise
                                       procedure
define all terms — AIC

Show ANOVA table - make sure explanatories are FACTORS,
ie, correct df)
   — Final anova table?
5. Model assessment:

1/2   CLEARLY state model assumptions:

   1. errors have mean 0
   2. errors are homoscedastic (same variance)
   3. errors are uncorrelated — ?? autocorr??
   4. errors are normally distributed

   carry out assessment (graphics):   square plot
      qq normal plot of residuals, —
      residuals vs. fitted

unclear
   — you assess model, NOT 'validate' it

3.25/7.75

0.25 / 1

6. Write out final estimated model **mathematically** not R formula

    (10)

    hat on response variable   max **2 sig digits** on coefs
    (ok if coefs in table)

0.5 / 1.25

7. Plots: number each figure

    label size (not too small)   captions

    placement   **NOT BLURRY**   meaningful labels

0 / 1

8. Conclusions

    recap analysis   state main findings

0.75 / 1

9. Language quality: a lot is unclear

    poor   satisfactory   good   excellent

10. Other comments:

- too much blank space
- write model mathematically
- what is table at bottom p.1 for?
- p.4 - what is 'this hyp'?
- p.5 - interpretations not clearly explained
- conclusion?
- ref 2 incomplete
- most refs not cited in text

1.5 / 4.25

A1: Group ___03___ 4.75/12 → 2.375/6

1. Formatting:

0/0.75

___ all margins 2.5cm   (informative title)

___ 12 pt size   member names on all pgs

no raw R code or output   all pages numbered

(max **7** pages)   no blurry plots (**NOT png**)

1/1

2. Introduction/Background:

brief statement of scientific question — Summarize vars in table, what you have is too verbose ???

all variables defined

0.5/2

3. EDA:

(univariate numerical)   ⊛ (bivariate numerical (cor))

univariate graphical   bivariate graphical

0.5/2

4. Model fitting:

Don't need QQ normal plot, show histogram for flavour + bar charts for others

(state how model fitted (ie, LS))

aren't you doing F-test, not LRT??

(CLEARLY describe how model selected) LRT ??

→ give mathematical description of model — interpret results

(define all terms)

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df — Write null/alt hyps mathematically

0.25/2

5. Model assessment:

CLEARLY state model assumptions: → not residuals

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

(which are estimated errors)

carry out assessment (graphics): not done ??
qq normal plot of residuals,
residuals vs. fitted

2.25/7.75   ⊛ don't need cov mat, and how are you computing cor mat? The variables and not numeric

0.5/1

6. Write out final estimated model **mathematically** { *give a mathematical formulation of model, ok if coefs in table*

   hat on response variable   max **2 sig digits** on coefs
   (ok if coefs in table)

0.5/1.5

7. Plots:

   label size (not too small)   captions

   placement   **NOT BLURRY**

0.5/1

8. Conclusions

   recap analysis   state main findings *overly broad*

9. Language quality:

   poor   satisfactory   (good)   excellent

'/1

10. Other comments:

   - your plots p. 8/9 should be in the text -
   change layout so that they fit and make
   vertical rather than horizontal boxplots

) → ` (open quote)   [Table 5 does not
                                     include size but
   - Figure, not Fig   does have an inter-
                                     action including
   - analysis of variance ✗   size]

   - remove . from var names in tables

   - you aren't including 'bivariates' in model,
     rather interactions

   - Do you compare 'general' model to [Table 5]
     model?
   - no refs
   - non-parallel lines indicate (not 'suggest')
                                     interactions

2.5/4.25

A1: Group _____ 04 _____ 8.25/12 → 4.125/6

0/0.75

1. Formatting:

all margins 2.5cm   (informative title)

12 pt size   member names on all pgs

no raw R code or output   all pages numbered

max **7** pages   no blurry plots (**NOT png**)

1/1

2. Introduction/Background:

brief statement of scientific question

all variables defined

1.25/2

3. EDA:

univariate numerical   (bivariate numerical (cor))

(univariate graphical)   bivariate graphical

1.25/2

4. Model fitting: — no ^ in mathematical formulation that includes error

state how model fitted (ie, LS)   model incorrectly specified, need code for factor levels

(CLEARLY describe how model selected)

define all terms — Tukey HSD + show results

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

1.25/2

5. Model assessment:

CLEARLY state model assumptions:

  1. errors have mean 0
  2. errors are homoscedastic (same variance)
  3. errors are uncorrelated
  4. errors are normally distributed

SQUARE → carry out assessment (graphics): + interpret
(qq normal plot of residuals,
residuals vs. fitted

— what does 'efficient' model mean??
— you have a size interaction without size in the model

4.75/7.75

6. Write out final estimated model **mathematically**

    hat on response variable   max **2 sig digits** on coefs
    (ok if coefs in table)

0.75

7. Plots:

1.2   label size (not too small)   captions

    placement   **NOT BLURRY**

0.75

8. Conclusions

    recap analysis   state main findings *(+ interpret)*

1

9. Language quality:

    poor   satisfactory   (good)   excellent

10. Other comments:

- 'Figure' not 'Fig'
- remove _ from var names in table
- I don't understand last paragraph p.4
- no technical refs
- need table of est. coefs

___

3.5 / 4.25

A1: Group _____ 06   65/12 → 3.25 / 6

1. Formatting:

0/0.75   all margins 2.5cm   informative title

12 pt size   member names on all pgs

no raw R code or output   all pages numbered

max 7 pages   no blurry plots (**NOT png**)

2. Introduction/Background: Appendix

brief statement of scientific question

all variables defined

0.75 / 2   3. EDA: → Define unclear what figure 2 shows, be

univariate numerical   bivariate numerical (cor)   clear

(*) univariate graphical   bivariate graphical

0.5 / 2   4. Model fitting: write model mathematically   why assess
                                                                 normality?
state how model fitted (ie, LS)   Do you need it?

CLEARLY describe how model selected

define all terms   AIC ?

Show ANOVA table - make sure explanatories are FACTORS,
ie, correct df

1.75 / 2   5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics): - figures too small
    qq normal plot of residuals,
    residuals vs. fitted

(*) EDA - Do not do tests, if you are going to
4/7.75   include the results from p.5, please
              use a table.

incorrect specification

0.5 /

6. Write out final estimated model **mathematically**

    hat on response variable   max **2 sig digits** on coefs
    (ok if coefs in table)

0.5 /
1.25 /

7. Plots:

    (label size (not too small))   (captions) *vague*

    placement   **NOT BLURRY**

0.5 /

    — Design plot labels incomplete

8. Conclusions

    recap analysis *(somewhat incomplete)*   state main findings — new paragraph

9. Language quality: ↳ vague, be specific

    poor   (satisfactory   good)   excellent

10. Other comments:

— no technical refs

— your report is hard to follow — too much
vague text running together; add structure
by using paragraphing and tables
— model fitting description vague +
superficial, please elaborate clearly
— what does 'stepwise AIC' mean?

2.5 / **4.25**

A1: Group __07__   7.5/12 → 3.75/6

1. Formatting:

0.5 / 0.75

all margins 2.5cm   (informative title)   you are not doing ANOVA on the paper

12 pt size   member names on all pgs

no raw R code or output   all pages numbered

max **7** pages   no blurry plots (**NOT png**)
— too many digits

2. Introduction/Background:

brief statement of scientific question

all variables defined

0.75 / 2

3. EDA:

univariate numerical   bivariate numerical (cor)   too many digits

(univariate graphical)   (bivariate graphical)

0.25 / 2

4. Model fitting: don't need it
very incomplete

state how model fitted (ie, LS)

CLEARLY describe how model selected + comparisons of different models

define all terms AIC/BIC

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

1.75

— write out the model mathematically

5. Model assessment: — you assess assumptions, not 'validate'

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):
qq normal plot of residuals,
residuals vs. fitted

4.5 / 7.25   model 'appropriateness' not 'validity'

0.5 / 1

→ model incorrectly specified – need 1 coef for each factor level

6. Write out final estimated model **mathematically**   estimated model does not have error term

    hat on response variable   **max 2 sig digits** on coefs
    (ok if coefs in table)

1 / 1.25

7. Plots: diagnostic plots a little small

    label size (not too small)   captions

    placement   **NOT BLURRY**

0.5 / 1

8. Conclusions – EDA does not assess significance

    recap analysis   state main findings ⊛ interpretation

9. Language quality:

1 / 1

    poor   satisfactory   (good)   excellent

10. Other comments:

⊛ 'significantly impact' – cannot determine
causality, only association
(+ 'temp harming flavor')
– too many digits
– '' → "

– SP:CM interactions – how does this
model compare – specifically – to model
without those interaction terms

– no refs

3 / 4.25

A1: Group _08_ 9/12 → 4,5/6

1. Formatting:

0,75/0.75

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max **7** pages

no blurry plots (**NOT png**)

2. Introduction/Background:

1/1

brief statement of scientific question

all variables defined

3. EDA: table(s) #obs chaque var/catégorie

1.5/2

~~univariate numerical~~

bivariate numerical (cor)

univariate graphical

bivariate graphical

4. Model fitting: D'abord, écrire le modèle mathématique que vous estimez

1.25/2

~~state how model fitted (ie, LS)~~

CLEARLY describe how model selected

define all terms

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df.

→ utiliser notation scientifique pour montrer les digits significatifs (dans les p-valeurs)

5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

1/2

carry out assessment (graphics):
qq normal plot of residuals, — SQUARE
residuals vs. fitted

— interp. floue/incorrecte

5.5/7.75

1/1

6. Write out final estimated model **mathematically**

    hat on response variable   max **2 sig digits** on coefs
    (ok if coefs in table)

0.75/1.25

7. Plots:

    label size (not too small)   captions

    placement   **NOT BLURRY**

0.75/1

8. Conclusions

    recap analysis   state main findings (*) interpretation

1/1

9. Language quality:

    poor   satisfactory   good   excellent

10. Other comments:

    — no refs

    —)) → '

(*) On ne peut pas conclure causalité ('ont le plus grand impact'), seulement association

3.5/4.25

A1: Group _____ 09   6.75/12 → 3.375/6

1. Formatting:

0.75/0.75

- all margins 2.5cm
- 12 pt size
- **no raw R code or output**
- max **7** pages

- informative title
- member names on all pgs
- all pages numbered
- no blurry plots (**NOT png**)

— too many digits

2. Introduction/Background:

0.5/1

- brief statement of scientific question
- all variables defined

3. EDA:

1/2

- univariate numerical   freq. table
- univariate graphical

- bivariate numerical (cor)
- bivariate graphical
  — color code hard to distinguish
  — write mathematical model that you are fitting

4. Model fitting: — Very incomplete

0.25/2

- state how model fitted (ie, LS)
- CLEARLY describe how model selected
- define all terms
- Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

1.5/2

plot interps

- CLEARLY state model assumptions: [before diag-plots]
  1. errors have mean 0
  2. errors are homoscedastic (same variance)
  3. errors are uncorrelated
  4. errors are normally distributed

- carry out assessment (graphics):
  qq normal plot of residuals, — square
  residuals vs. fitted

4/7.75

incorrectly specified

0/1

6. Write out final estimated model **mathematically**

    hat on response variable   max **2 sig digits** on coefs
    (ok if coefs in table)

1/1.25

7. Plots:

    label size (not too small)   captions

    placement   **NOT BLURRY**

0.75/1

8. Conclusions

    recap analysis *incomplete*   state main findings

1/1

9. Language quality:

    poor   satisfactory   (good)   excellent

10. Other comments:

— no refs?

— why only consider 2 factors? There are several

— need table of coefs for final model

— need est. coefs in table

2.75/4.25

A1: Group ___10___   7.25/12 → 3.625/6

1. Formatting:

0/0.75

(all margins 2.5cm)

(12 pt size)

no raw R code or output

max **7** pages

informative title

member names on all pgs

all pages numbered

no blurry plots (**NOT png**)

1/1

2. Introduction/Background:

brief statement of scientific question

all variables defined

1/2

3. EDA:

incomplete

(univariate numerical   bivariate numerical (cor))

univariate graphical   bivariate graphical

0.75/2

4. Model fitting:

→ write model mathematically

state how model fitted (ie, LS)

(CLEARLY) describe how model selected

define all terms   BIC/AIC

too many digits in p-values use scientific notation

Show ANOVA table - make sure explanatories are FACTORS ie, correct df

- Don't select models by EDA, use formal model selection techniques

1.5/2

5. Model assessment:

(CLEARLY state model assumptions:)

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

SQUARE carry out assessment (graphics):
qq normal plot of residuals,
residuals vs. fitted

+ interpretation

4.25/7.75

0.75/1

6. Write out final estimated model **mathematically**

  hat on response variable   max **2 sig digits** on coefs
  (ok if coefs in table)

0.75

1.25

7. Plots: + SQUARE QQ

  (label size)(not too small)   captions

  placement   **NOT BLURRY**

0.5

8. Conclusions

  recap analysis   state main findings *interpretation*

/1

9. Language quality:

  poor   satisfactory   (good)   excellent

10. Other comments:

  - Figure, not Fig
  - 'crucial' EDA sounds like overkill
  - write null/alt hyps mathematically
  - ⊗ 'significant factors impacting flavor' - cannot
    → determine causality, only association
    'lead to'

  - no refs

  - need est. coefs in table

3 / 4.25

A1: Group __12__   7/12 → [3.5 /6]

1. Formatting:

0.75 ⟍ (all margins 2.5cm)   informative title

12 pt size   member names on all pgs

0.75 **no raw R code or output**   all pages numbered

max **7** pages   no blurry plots (**NOT png**)
                — Don't need date

2. Introduction/Background:

1/1 brief statement of scientific question

all variables defined

3. EDA:

1/2 (univariate numerical)   (bivariate numerical (cor))

univariate graphical   bivariate graphical

4. Model fitting: → model incorrectly specified—
0.75/2   need 1 coef for each
state how model fitted (ie, LS)   factor level

CLEARLY describe how model selected   write null/alt hyps mathematically

define all terms

Show ANOVA table - make sure explanatories are FACTORS,
ie, correct df
— Should not eliminate vars/models from consideration
based on EDA - use formal
5. Model assessment: model selection techniques

1.5/2 CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):
SQUARE ← qq normal plot of residuals,
residuals vs. fitted
+ interpretation

5/7.75

0/1 6. Write out final estimated model **mathematically** ~~not done~~

   hat on response variable   max **2 sig digits** on coefs
   (ok if coefs in table)

0.75/ 1.25 7. Plots: +SQUARE QQ

   (label size (not too small))   captions

   placement   **NOT BLURRY**

025 .1 8. Conclusions — not 2-way because you have more than 2 vars

   (recap analysis)   state main findings ⊛ interpretation

Y/1 9. Language quality:

   poor   satisfactory   (good)   excellent

10. Other comments:

   – Don't use 'indeed'– sounds normal in French,
     but pretentious in English

   – Figure not Fig.

   ⊛ p.4 'changes significantly'– cannot
     determine causality, only association

   – assumptions assessed not verified

   – plot interpretations not explicitly explained

   – Tukey (not Tuckey) – write out test
                          explicitly

   – no refs
   ↳ put results in a table, not text, then
2/ interpret in text
4.25

A1: Group **13**   7/12 → **3.5 / 6**

1. Formatting:

0 / 0.75

all margins 2.5cm

(12 pt size)

no raw R code or output

max **7** pages

informative title

(member names on all pgs)

all pages numbered

no blurry plots (**NOT png**)

— Don't need date

2. Introduction/Background:

1 / 1

brief statement of scientific question

all variables defined

3. EDA: not anova

1 / 2

(univariate numerical

univariate graphical)

bivariate numerical (cor)

bivariate graphical

4. Model fitting:

0.5 / 2

(state how model fitted (ie, LS))

CLEARLY describe how model selected —

(define all terms) AIC

Show ANOVA table - make sure explanatories are FACTORS
ie, correct df

you should not remove lower order terms if you keep interactions and you need to keep ALL levels of any factor you keep

5. Model assessment:

1.25 / 2

(CLEARLY state model assumptions:)

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):
qq normal plot of residuals,
residuals vs. fitted

+ interpretation

3.75 / 7.25

0.75/1 → wrong model - see my fitting comments

6. Write out final estimated model **mathematically**

    hat on response variable   max **2 sig digits** on coefs
    (ok if coefs in table)

1/1.25 7. Plots:

    label size (not too small)   captions — describe plot contents only, interpret in text

    placement   **NOT BLURRY**

0.5 8. Conclusions

    recap analysis   state main findings (*) interpretation

9. Language quality:

    poor   satisfactory   **good**   excellent

10. Other comments:

    - Describe in text what each figure depicts!

    eg 'Figure 1 shows ...' then interpret

    (*) 'have no influence' - cannot determine

    causality, only association (also 'impact on...')

    - refs for techniques

3.25/4.25

A1: Group _____

1. Formatting:

0.75 / 0.75

all margins 2.5cm   informative title

12 pt size   member names on all pgs

no raw R code or output   all pages numbered

max **7** pages   no blurry plots (**NOT png**)

2. Introduction/Background:

4 / 1

brief statement of scientific question

all variables defined

3. EDA:

2 / 2

univariate numerical   bivariate numerical (cor)

univariate graphical   bivariate graphical

4. Model fitting:

1.5 / 2

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

1.75 / 2

CLEARLY state model assumptions: → on the errors

    1. errors have mean 0
    2. errors are homoscedastic (same variance)
    3. errors are uncorrelated
    4. errors are normally distributed

missing — ○

carry out assessment (graphics):
    qq normal plot of residuals, → SQUARE
    residuals vs. fitted

+ clear plot interp.

7 / 7.75

0.75/1

6. Write out final estimated model **mathematically**

    hat on response variable   max **2 sig digits** on coefs
    (ok if coefs in table)

1.25/1.25

7. Plots:

    label size (not too small)   captions

    placement   **NOT BLURRY**

0.75/1

8. Conclusions

    recap analysis   state main findings
                          └ separate paragraph

+0.25

9. Language quality:

    poor   satisfactory   good   (excellent)

10. Other comments: (estimated)

─ need table of coefs

4/4.25

A1: Group __64__ 7.75/12 → 3.875/6

1. Formatting:

0.5/0.75

all margins 2.5cm   informative title

12 pt size   member names on all pgs

(no raw R code or output)   all pages numbered

max **7** pages   no blurry plots (**NOT png**)

2. Introduction/Background:

1/1

brief statement of scientific question

all variables defined

3. EDA:

2/2

univariate numerical   bivariate numerical (cor)

univariate graphical   bivariate graphical

4. Model fitting:

0.75/2

(state how model fitted (ie, LS))

(CLEARLY describe how model selected)

define all terms

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

0.75/2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):
qq normal plot of residuals, → square
residuals vs. fitted

— plot interps — explain clearly

5/7.75

0.5/1

6. Write out final estimated model **mathematically**

    hat on response variable   max **2 sig digits** on coefs
    (ok if coefs in table)

1/1

7. Plots:

    label size (not too small)   captions

    placement   **NOT BLURRY**

0.25/1

8. Conclusions

    recap analysis   state main findings

1/1

9. Language quality:

    poor   satisfactory   (good)   excellent

10. Other comments:

- no refs

- need table of est. coefs

- clearly explain plot interpretations

- Don't need to start by doing single ANOVAS,
start with full model then do model selection

- you need to treat explanatory variables as FACTORS,
you seem to treat them as numeric

- need to put est. coefs in table

2.75/4.25

A1: Group _____ 65   4.75/12 → **2.375/6**

0.5/0.75

1. Formatting:

all margins 2.5cm   informative title

12 pt size   member names on all pgs

(no raw R code or output)   all pages numbered

max **7** pages   no blurry plots (**NOT png**)

0.75/1

2. Introduction/Background:

brief statement of scientific question

all variables defined — *Flavor score?*

3. EDA:

univariate numerical   bivariate numerical (cor)

univariate graphical   bivariate graphical

0.75/2

4. Model fitting: *Complete EDA before fitting*

state how model fitted (ie, LS)

(ok but out of place — what is the mathematical model you are)

(CLEARLY describe how model selected)   *Explain forward/ backward procedures* *fitting?*

AIC? define all terms

(Show ANOVA table - make sure explanatories are FACTORS, ie, correct df)

0.75/2

5. Model assessment: *Complete fitting BEFORE assumptions*

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics): —→ *plot interpretations not clear/ correct*
qq normal plot of residuals, → *square*
residuals vs. fitted

— you don't 'verify' model, you assess it

2.75/7.75

0/1

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

0.75
/1.25

7. Plots:

label size (not too small)

placement

captions   number and
caption for each
Figure

NOT BLURRY

0.25/1

8. Conclusions

recap analysis

state main findings * interpretation

9. Language quality:

poor   satisfactory   good   excellent

— what are the 'crucial
insights' ??

'/1

10. Other comments:

— no refs

— can put est. coefs in Appendix

— cannot conclude causality, for example, you say
(p.2) 'flavor is highly affected by' → can only conclude
association

→ '' → ''

(*) cannot conclude causality, only association

2/4.25

A1: Group ____ 66 ____ 6.75/12 → 3.375/6

1. Formatting:

0 .5/0.75

- all margins 2.5cm
- 12 pt size
- **no raw R code or output**
- max **7** pages

- informative title
- member names on all pgs
- all pages numbered
- no blurry plots (**NOT png**)

2. Introduction/Background:

1/1

- brief statement of scientific question
- all variables defined

3. EDA:

2/2

- univariate numerical
- univariate graphical

- bivariate numerical (cor)
- bivariate graphical

4. Model fitting:

0.5/2

First write out the model you are fitting

- state how model fitted (ie, LS)
- CLEARLY describe how model selected
- define all terms *Stepwise? AIC?*
- Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment: → NOT in Conclusion

0.75/2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

4.75/7.75

— Don't need hyp. test, just use diagnostic plots

carry out assessment (graphics):
qq normal plot of residuals, *— SQUARE*
residuals vs. fitted

plot interp
→explain

— you assess model, NOT 'verify'
'validate'

A1: Group _____ 79   5.5/12 → 2.75/6

1. Formatting:

0.75/   0.75

all margins 2.5cm   informative title

12 pt size   member names on all pgs

no raw R code or output   all pages numbered

max **7** pages   no blurry plots (**NOT png**)

0.5/1   **2. Introduction/Background:**

brief statement of scientific question   *not clear*

all variables defined   *write*

(.25/2   **3. EDA:**   *put results in table(s)*

univariate numerical   bivariate numerical (cor)

univariate graphical   bivariate graphical

0.25/2   **4. Model fitting:** *First, write the mathematical model you are fitting*

very incomplete

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment: *— not 'QQ plot of model', its the residuals*

0.75/2   CLEARLY state model assumptions:

     1. errors have mean 0
     2. errors are homoscedastic (same variance)
     3. errors are uncorrelated
     4. errors are normally distributed

carry out assessment (graphics):
qq normal plot of residuals, *— square*
residuals vs. fitted

— interpretations not clear/correct

3.5/7.75

0/1

6. Write out final estimated model **mathematically**

      hat on response variable   max **2 sig digits** on coefs
      (ok if coefs in table)

0.5 / 1 .25

7. Plots:

      (label size (not too small))   captions — *somewhat unclear*

      placement   (**NOT BLURRY**)

0.5 / 1

8. Conclusions

      (recap analysis)   state main findings *(*) interpretation*

9. Language quality:

1 / 1

      poor   satisfactory   (good)   excellent

10. Other comments:

no refs

– ANOVA p-values 0.00 → use scientific notation to show sig digits

– Don't need all the intermediate ANOVA tables

(*) Cannot conclude causality, only association

2 / 4.25

0.5 / 1

→ no error term for est. model

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

0.5 / 1.25

7. Plots: — number each Figure

label size (not too small)

captions

placement

NOT BLURRY

0.25

8. Conclusions

recap analysis

state main findings ✳

0.75 / 1

9. Language quality:

poor   satisfactory   good   excellent

10. Other comments:

— no refs

— writing style is too much like 'question /
answer' format — write in complete sentence
with clear explanations

✳ cannot conclude causality, only association

2 / 4.25