AMA3020: Investigations

Report writing guidance

Andrew Brown

Goal

By the end of this session, students will be able to

- Plan the writing of the pair presentation report
- Self-assess their report drafts against the marking rubric
- Avoid common mistakes in written work

Rubric

Solo/Pairs/Presentation						
Criteria	**Ratings**					**Pts**
Motivation	**10 to >8.0 Pts** **Full marks** No improvements possible	**8 to >7.0 Pts** **High First** There is a *critical* discussion of the context of the problem, the limitations of the model, and the possible extensions or improvements.	**7 to >6.0 Pts** **First** There is a discussion of the context of the problem (real-world applications, approximations, and extensions)	**6 to >4.0 Pts** **2.1** Some attempt is made to connect the problem to the broader context (e.g. the field of mathematics)	**4 to >0 Pts** **Pass** The problem is stated clearly	10 pts
Solution	**10 to >8.0 Pts** **Full marks** No improvements possible	**8 to >7.0 Pts** **High First** The piece uses a well-structured narrative which explains the method of solution and the key results obtained using suitable diagrams and figures.	**7 to >6.0 Pts** **First** Key results and methods are illustrated using appropriate diagrams and figures	**6 to >4.0 Pts** **2.1** All terms in all equations are defined and explained, and the figures have all axes and datasets properly labelled.	**4 to >0 Pts** **Pass** At least one key result is shown	10 pts
						Total points: 20

Motivation

- Why should we care?
- What is the research question?
- Careful with 'real-world' applications
- Critical discussion

Solution

Solo/Pairs/Presentation						
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Motivation	**10 to >8.0 Pts** **Full marks** No improvements possible	**8 to >7.0 Pts** **High First** There is a *critical* discussion of the context of the problem, the limitations of the model, and the possible extensions or improvements.	**7 to >6.0 Pts** **First** There is a discussion of the context of the problem (real-world applications, approximations, and extensions)	**6 to >4.0 Pts** **2.1** Some attempt is made to connect the problem to the broader context (e.g. the field of mathematics)	**4 to >0 Pts** **Pass** The problem is stated clearly	10 pts
Solution	**10 to >8.0 Pts** **Full marks** No improvements possible	**8 to >7.0 Pts** **High First** The piece uses a well-structured narrative which explains the method of solution and the key results obtained using suitable diagrams and figures.	**7 to >6.0 Pts** **First** Key results and methods are illustrated using appropriate diagrams and figures	**6 to >4.0 Pts** **2.1** All terms in all equations are defined and explained, and the figures have all axes and datasets properly labelled.	**4 to >0 Pts** **Pass** At least one key result is shown	10 pts
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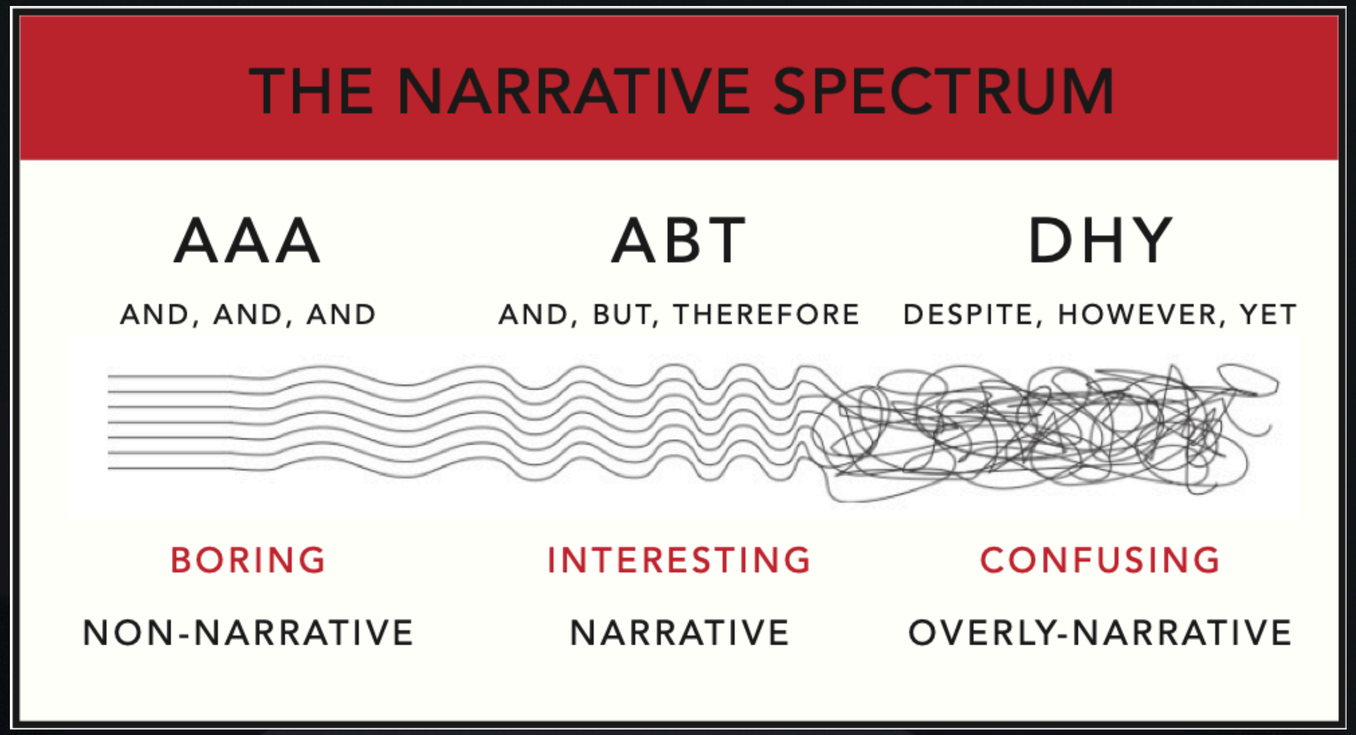
Solution

- No mention of derivation
- Story
- Pictures/Patterns



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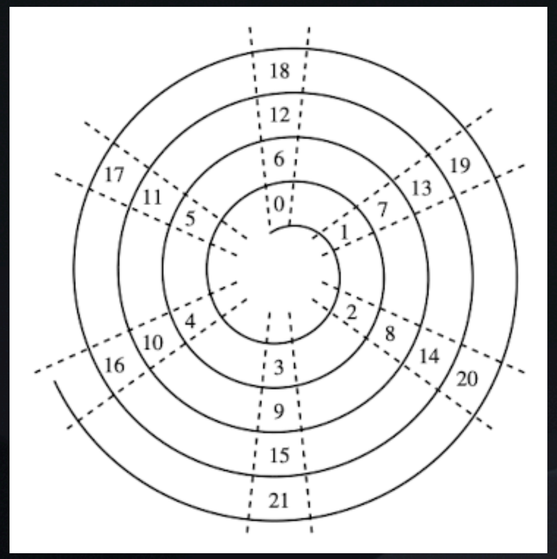

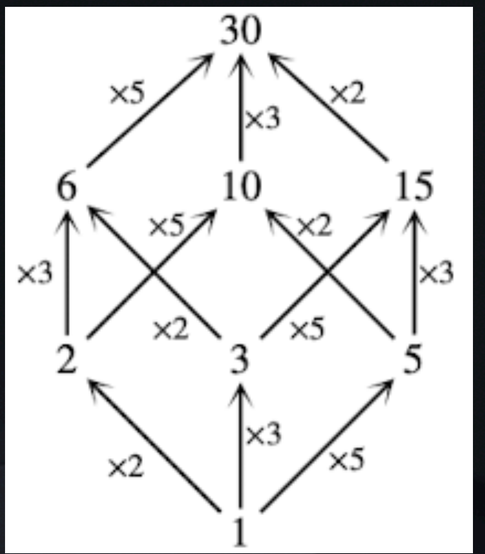

Strategy

1. Figures (results)
2. Captions
3. Story
4. Bullet point per outcome/ result
5. Paragraph per figure
6. Theory
7. Conclusion
8. Introduction

Dos and Don'ts

Do

- Use the template
- Use Grammarly
- Define all terms
- Use Axes labels, legends, colourbars...
- Reference the figures in the text

Don't

- Bury in detail
- Submit your first draft
- Use casual language
- Write in bullet points
- Plagiarise