Do students do their homework last minute?

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# Plan

- Background
- Charts for standard data
- Charts for non-standard data

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- Conclusions
- Limitations of data

# Background, The Modules

Semester 1	Physics 1	Maths 1
	Physics 2	
Semester 2	Physics 3	Maths 2
	Physics 4	

Majority of homework in Physics and Maths is done via Numbas e-assessment.

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- Physics
  - 4 weekly e-assessments. Released each Monday. Deadline 10am the Monday after.

▶ 1 longer e-assessment. Details not relevant.

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- Physics
  - 4 weekly e-assessments. Released each Monday. Deadline 10am the Monday after.
  - ▶ 1 longer e-assessment. Details not relevant.
- Maths
  - ▶ 8 weekly e-assessments. Released each Monday.
  - Maths 1. Single deadline, weekend before exam-week.

Maths 2. Weekly deadlines, like in Physics.

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- Maths 2. Weekly deadlines, like in Physics.
- Inconsistent because we're trying to find what works.

## Background, The Data

- E-assessment system records lots of data.
- I looked at the Start Time.
  - The time that student first *opens* the assessment.
- (End Time data was not reliable/consistent.)
- Credit to Paul Howes for obtaining the data from the system.

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# Charts for standard data, Breakdown of Sunday and Monday



# Charts for standard data, Breakdown of Sunday and Monday



#### Physics 1, Assessment 1, Sunday and Monday

# Charts for standard data, Breakdown of Sunday and Monday



#### Physics 1, Assessment 2, Sunday and Monday

# Charts for standard data, Breakdown of Sunday and Monday



# Charts for standard data, Breakdown of Sunday and Monday



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#### Charts for non-standard data, Physics 3

At end of Week 1, we extended the deadline for all assessments to end of module.

# Charts for non-standard data, Physics 3

At end of Week 1, we extended the deadline for all assessments to end of module. Physics 3, Assessments 1 to 4



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At end of Week 1, we extended the deadline for first 4 assessments. Last 4 assessments had weekly deadlines.

At end of Week 1, we extended the deadline for first 4 assessments. Last 4 assessments had weekly deadlines. Maths 2, All Assessments



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Assessments released weekly, but single deadline weekend before exams.

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Assessments released weekly, but single deadline weekend before exams. Maths 1, All Assessments



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### Conclusions

Students, as a cohort, do the work relatively late.

- One consequence: cannot assume comfort with material taught on Monday during sessions later in the week.
- Students habits highly sensitive to deadlines.
  - Most students do know the deadlines.
  - Our choices have big impact on student habits.
  - More general point: students respond to incentives (e.g. attendance in lectures versus assessed sessions).
- ► Particularly important for 'linear' subjects, e.g., maths.
- Shouldn't judge students or label them as 'bad students'
  - Better to label the habit, not the individual.
  - This is more to do with human nature, than students in particular.

# Limitations of data

- Only looked at start time.
- Most of our students done A-Level Maths and/or Physics.
- Does not include students who did not make an attempt.
- Data only for small assessments.
  - No data on projects/large assessments.
  - My prediction is similar patterns will emerge, just spread out.

- Various other little things.
  - Did not take into account mit circs.
  - Students have a practice version available.
  - Etc.