## Welcome to MAT137 - Calculus with proofs!

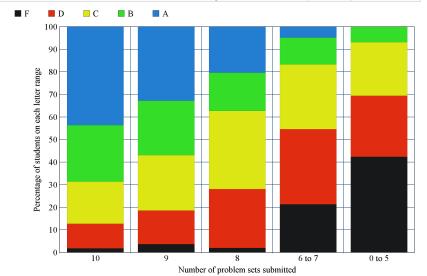
- Class begins at 10 minutes past the hour
- Your instructor is Professor Alfonso Gracia-Saz
- Course website: http://uoft.me/MAT137

- Before next class:
  - Watch videos 1.1, 1.2, 1.3
  - Download next class slides.
    No need to look at them.

How do students do in MAT137?

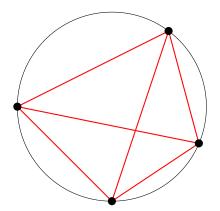
It depends on

how many problem sets they submit.

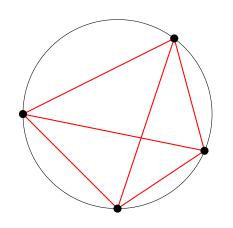


## A warm-up problem

- Pick 4 points at random on a circle (without any symmetry).
- Join every pair of points.
- In how many regions is the circle divided?



# A warm-up problem



# of points	# of regions
1	1
2	2
3	4
4	8
5	16
6	???

#### Fire

Which of the following statements are equivalent to the statement,

"No two students in this class are not on fire."

Which are equivalent to its negation?

- 1. "All student in this class, except at most one, are on fire."
- 2. "Two students in this class are on fire."
- 3. "For any pair of students in this class, one of them is on fire."
- 4. "At least two students in this class are not on fire."
- 5. "If I choose two students in this class and one of them is not on fire, then the other one is on fire."