Welcome to MAT137!

- Hi! My name is Qin (pronounced 'Chin').

Welcome to MAT137!

- Hi! My name is Qin (pronounced 'Chin').

- Email: qin.deng@mail.utoronto.ca

Welcome to MAT137!

- Hi! My name is Qin (pronounced 'Chin').

- Email: qin.deng@mail.utoronto.ca

- Office hours: T5 - 7 @ PG003.

Welcome to MAT137!

- Hi! My name is Qin (pronounced 'Chin').

- Email: qin.deng@mail.utoronto.ca

- Office hours: T5 - 7 @ PG003.

- Course website:
  http://www.math.toronto.edu/zaman/137/137.html

Welcome to MAT137!

- Hi! My name is Qin (pronounced 'Chin').

- Email: qin.deng@mail.utoronto.ca

- Office hours: T5 - 7 @ PG003.

- Course website:
  http://www.math.toronto.edu/zaman/137/137.html

- My website: http://www.math.toronto.edu/dengqin

Welcome to MAT137!

- Hi! My name is Qin (pronounced 'Chin').

- Email: qin.deng@mail.utoronto.ca

- Office hours: T5 - 7 @ PG003.

- Course website:
  http://www.math.toronto.edu/zaman/137/137.html

- My website: http://www.math.toronto.edu/dengqin

- **Homework: Enrol in a tutorial &**

  Watch videos 4 - 6 on Playlist 1

Welcome to MAT137!

- Hi! My name is Qin (pronounced 'Chin').

- Email: qin.deng@mail.utoronto.ca

- Office hours: T5 - 7 @ PG003.

- Course website:
  http://www.math.toronto.edu/zaman/137/137.html

- My website: http://www.math.toronto.edu/dengqin

- **Homework: Enrol in a tutorial &**

  Watch videos 4 - 6 on Playlist 1

- **Problem set 1** has been posted on the course website. It is due on Thursday, September 26th.
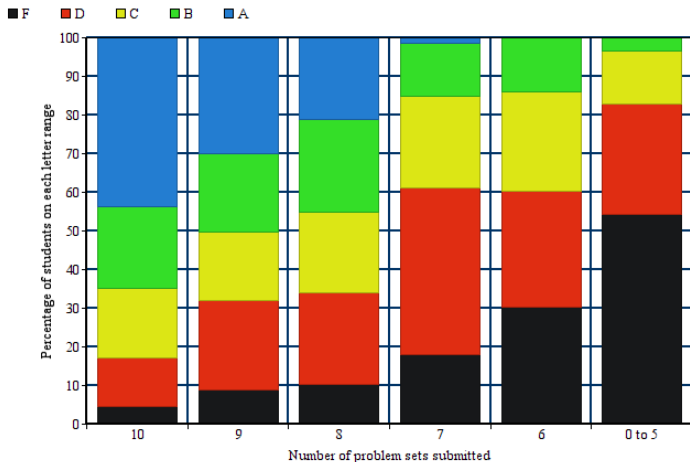
Performance in MAT137Y as a function of tutorials attended
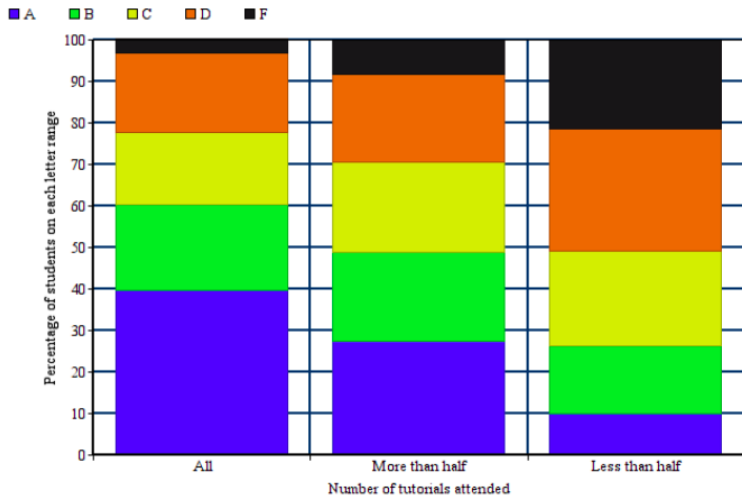
Some Propaganda Part 2: Do your homework!

Performance in MAT137Y as a function of problem sets submitted (2017-2018)

Philosophy of the course

1. This class is in inverted format. It's critical that you watch the assigned videos before coming to class.

Philosophy of the course

1. This class is in inverted format. It's critical that you watch the assigned videos before coming to class.

2. We focus on understanding and learning, not memorization.

Philosophy of the course

1. This class is in inverted format. It's critical that you watch the assigned videos before coming to class.

2. We focus on understanding and learning, not memorization.

3. This is a calculus class.

Philosophy of the course

1. This class is in inverted format. It's critical that you watch the assigned videos before coming to class.

2. We focus on understanding and learning, not memorization.

3. This is a calculus class.

Philosophy of the course

1. This class is in inverted format. It's critical that you watch the assigned videos before coming to class.

2. We focus on understanding and learning, not memorization.

3. This is a calculus class. But first and foremost, this is a logic and critical thinking class.

4. This is going to be a tough course for many of you. Be prepared to work hard and build habits!

Philosophy of the course

1. This class is in inverted format. It's critical that you watch the assigned videos before coming to class.

2. We focus on understanding and learning, not memorization.

3. This is a calculus class. But first and foremost, this is a logic and critical thinking class.

4. This is going to be a tough course for many of you. Be prepared to work hard and build habits!

5. Don't be afraid to ask questions or be wrong in class. I'm not here to judge you. And you shouldn't be here to judge others either.

What are the following sets?

1. $(2, 4] \cup (3, 5]$
2. $(-\infty, 4] \cap [3, \infty)$
3. $[4, 2)$
4. $(0, 0)$
5. $[0, 0]$

Set description

What are the following sets?

1. $\left\{ x \in \mathbb{N} : x^2 < 6 \right\}$
2. $\left\{ x \in \mathbb{Z} : x^2 < 6 \right\}$
3. $\left\{ x \in \mathbb{R} : x^2 < 6 \right\}$

What are the following sets?

1. $\{x \in \mathbb{R} : \forall y \in [0, 1], x < y\}$
2. $\{x \in \mathbb{R} : \exists y \in [0, 1] \text{ s.t. } x < y\}$
3. $\{x \in [0, 1] : \forall y \in [0, 1], x < y\}$
4. $\{x \in [0, 1] : \exists y \in [0, 1] \text{ s.t. } x < y\}$
5. $\{x \in [0, 1] : y \in [0, 1], x < y\}$
6. $\{x \in [0, 1] : \exists y \in \mathbb{R} \text{ s.t. } x < y\}$

New set operations: Set difference

Given two sets A and B. We define

$A \backslash B := \{x \in A : x \notin B\}$. This set is called "A minus B".

Given two sets A and B. We define

$A \backslash B := \{x \in A : x \notin B\}$. This set is called "A minus B".

What are the following sets?

1. $[0, 1] \backslash (-0.5, 1)$
2. $[0, 1] \backslash (1, \infty)$
3. $\mathbb{R} \backslash [0, 1]$
4. $[0, 1] \backslash \mathbb{R}$

1. $A := \{$Students in computer sciences$\}$
2. $B := \{$Students who do not have brown eyes$\}$
3. $C := \{$Students who like math$\}$

Raise your hand if you are in $(A \backslash B) \cup (B \backslash A)$.

1. $A := \{$Students in computer sciences$\}$
2. $B := \{$Students who do not have brown eyes$\}$
3. $C := \{$Students who like math$\}$

Raise your hand if you are in $C \backslash (B \backslash C)$.

Let S be the set of even integers. Write S in set-building notation.

Set description: rational numbers

Let S be the set of rational numbers. Write S in set-building notation.