

AL FM Discrete

Template, ([TeX](#))

May 26, 2021

Here is some normal text. Followed by a list.

- ✖ First item.
- ✖ Second item
- ✖ ✖ List inside a list!!
- ✖ Final item

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There are three commonly used boxes.

Definition

This is a **definition box**, it can be helpful to put the word being defined into bold text.

Problem

This is a problem box. With some displayed math...

$$y = x^2$$

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Solution

Appears even later!

The `\sol` command

The first time you use `\it doesn't cover it up`.

However the second time .

You can put math inside it, $5x + 4x =$

And you can use it inside a math environment:

$$y = \boxed{}$$

$$x = \boxed{}$$

$$xy = \boxed{}$$

But this will throw up some errors, but still compile.

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However the second time `it does`.

You can put math inside it, $5x + 4x =$ `9x`

And you can use it inside a math environment:

$$y = 5$$

$$x = x^2$$

$$xy = 5x^2$$

But this will throw up some errors, but still compile.

columns

Columns can be very useful.

To display info side by side.

Problem

You can even put boxes inside the columns to save space.

Definition

Using columns inside boxes is best achieved with minipages.

		Player 2		
		X	Y	Z
Player 1	P	4	2	2
	Q	-3	5	1
	R	2	-1	3

columns

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Definition

Using columns inside boxes is best achieved with minipages.

Solution

With a solution.

		Player 2		
		X	Y	Z
Player 1	P	4	2	2
	Q	-3	5	1
	R	2	-1	3

The tikzmarknode command

Useful when annotating equation

Use it anywhere to create a node named anything that you can refer back to later.
Also compiles but with errors...

Maximise

$$P = V - 3$$

Subject to

$$V - 6p - 4q + s_1 = 0$$

$$V - p - 7q + s_2 = 0$$

$$p + q + s_3 = 1$$

The annotation x^2

Tables

P	v	p	q	s_1	s_2	s_3	RHS
1	-1	0	0	0	0	0	-3
0	1	-6	-4	1	0	0	0
0	1	-1	-7	0	1	0	1
0	0	1	1	0	0	1	1

Tikz pictures, as well as tables, basically everything can be shrunk with the adjust box command. You can specify max width, max height, width height etc.

P	v	p	q	s_1	s_2	s_3	RHS
1	[-1]	0	0	0	0	0	-3
0	1	-6	-4	1	0	0	0
0	1	-1	-7	0	1	0	0
0	0	1	1	0	0	1	1

The shrink command, automatically shrinks to fit on page, but is helpful to give a number so it knows how much horizontal space it has.

This is the contents.

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Problem

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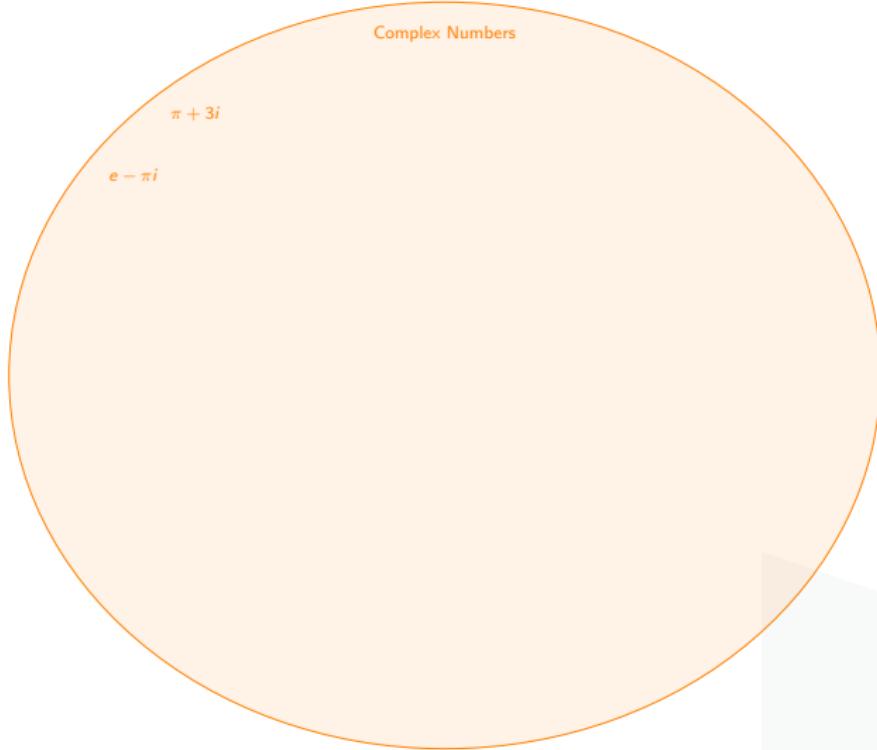
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The onslide

Can be used on anything but really cool with tikz pictures.

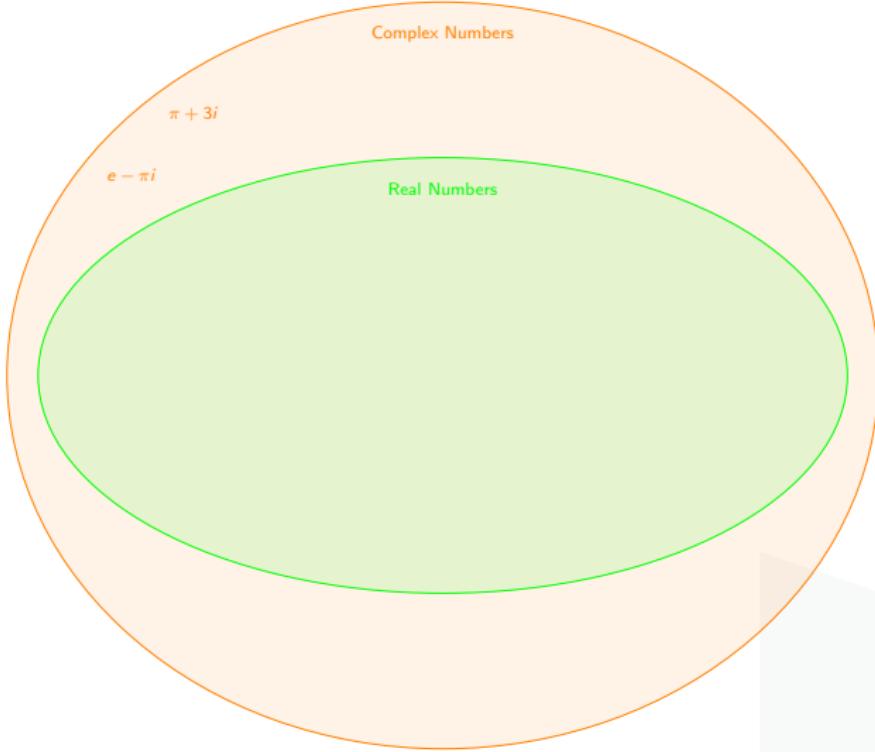
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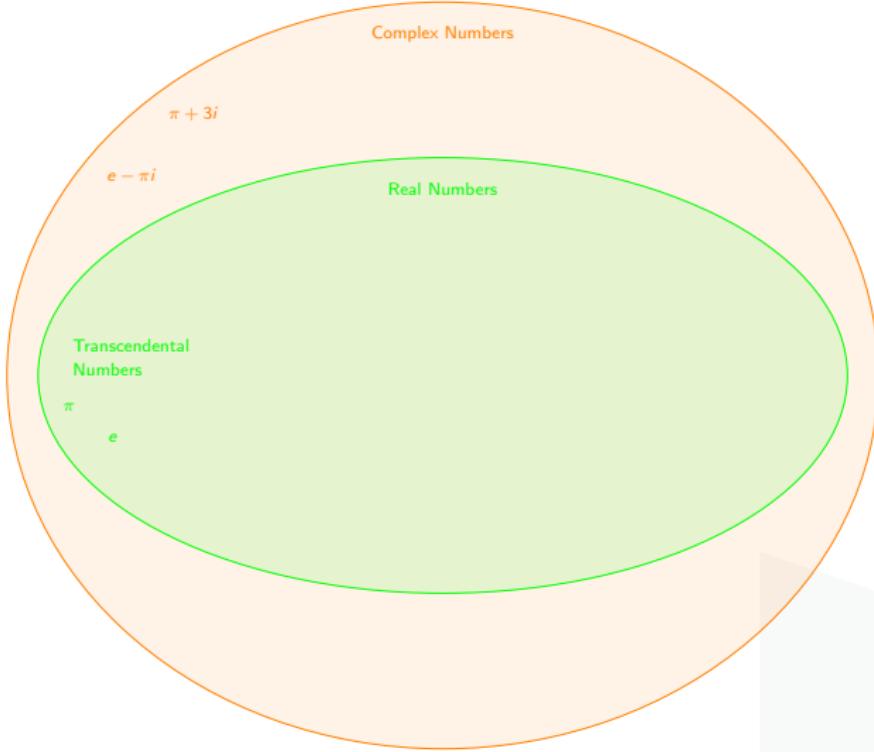
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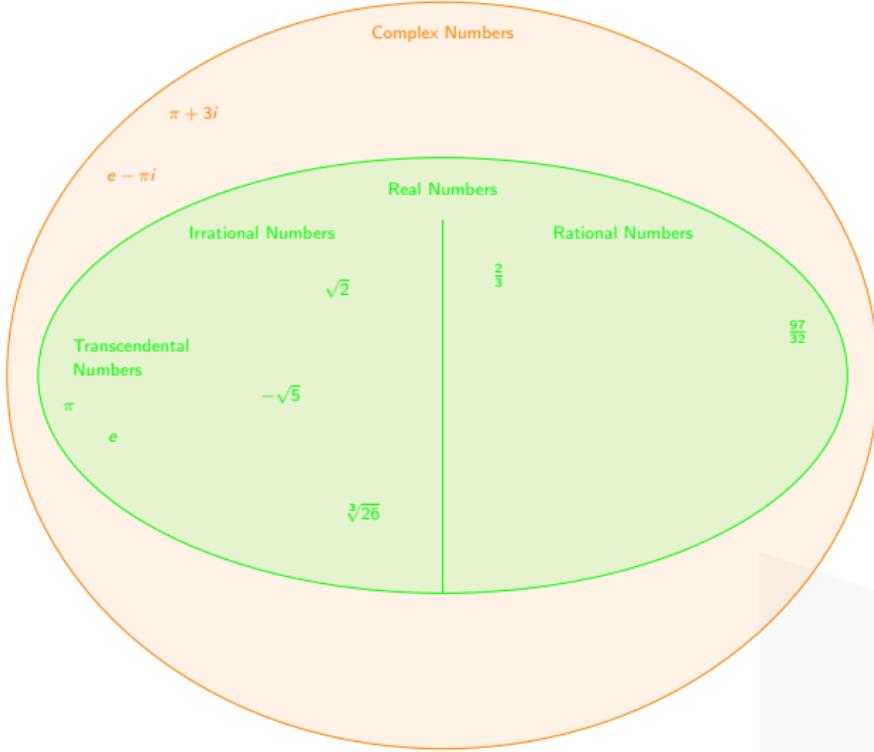
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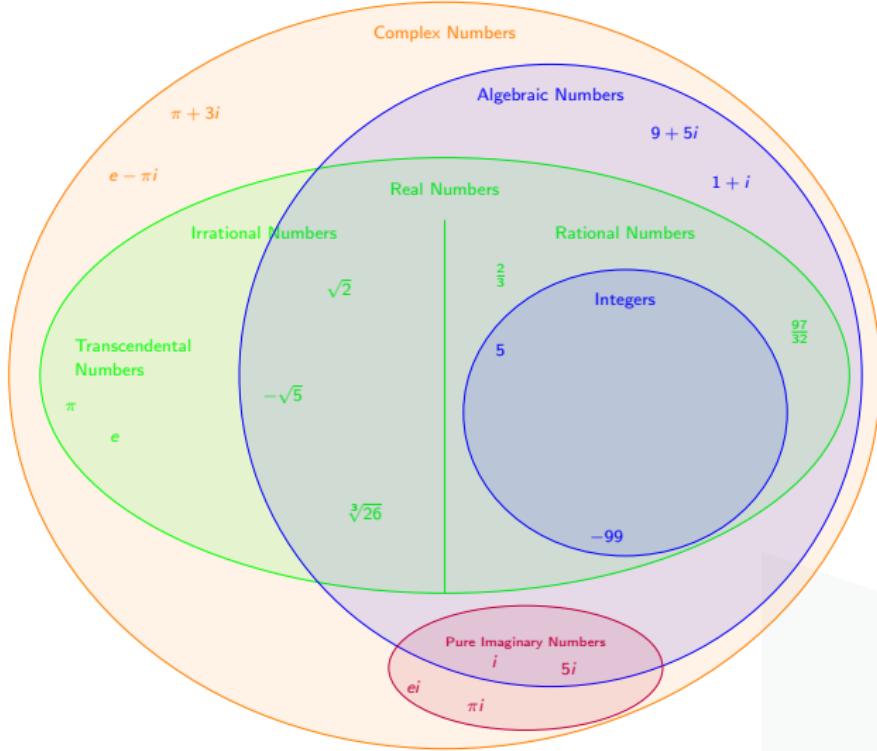
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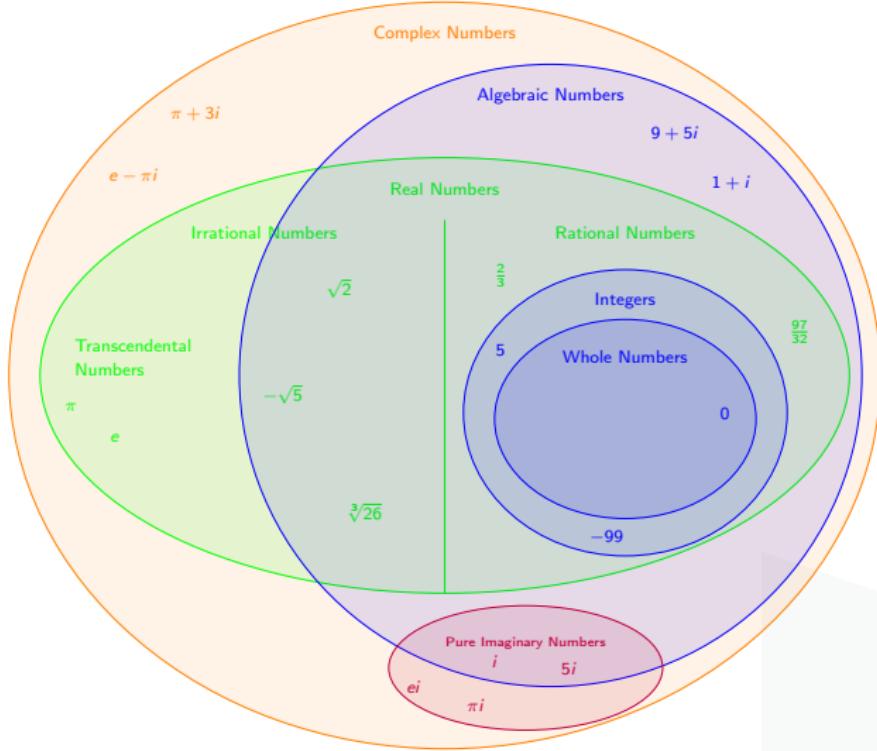
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