Paper
Mock title for mock paper

Introduction

This is my mock paper to show the ease of working with pandoc [1]. This is a simple yet very powerful construct which allows you to combine markdown with LaTeX in one and the same file. Also shown in this file is how you can do references by specifying a `.bib` file in your `YAML` header. Some compact examples include:

(Don't forget that these are just some examples. I encourage you to read the documentation and try it yourself)

- item 1
- **References** look *like* `this`: [1], [2]

```
def compute(x):
    return x**3 + 7 * x + 1
```

Let $E : y^2 = x^3 + 7x + 1$ be an elliptic curve over $\mathbb{F}_{13}$. Verifying that the point $(5, 3)$ is on the curve can be done as follows:

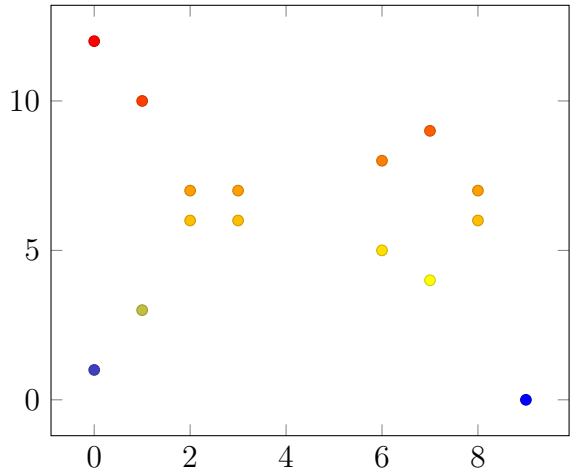
$$
\begin{aligned}
y^2 &= x^3 + 7x + 1 \\
5^2 &= 3^3 + 7 \cdot 3 + 1 \\
25 &= 81 + 21 + 1 \\
25 &= 103 \\
\text{Adjusting for } \mathbb{F}_{13} & \\
12 &= 12 \\
&\square
\end{aligned}
$$

Creating a table to show *all* the points on the curve E:

x	x^2	$x^3 + 7x + 1$	y	points
0	0	1	1, 12	(0, 1), (0, 12)
1	1	9	3, 10	(1, 3), (1, 10)
2	4	10	6, 7	(2, 6), (2, 7)
3	9	10	6, 7	(3, 6), (3, 7)
4	3	2	-	-
5	12	5	-	-
6	10	12	5, 8	(6, 5), (6, 8)
7	10	3	4, 9	(7, 4), (7, 9)
8	12	10	6, 7	(8, 6), (8, 7)
9	3	0	0	(9, 0)
10	9	5	-	-
11	4	5	-	-
12	1	6	-	-

We can also plot this curve:

Plotting the curve E over $\mathbb{F}_{13} \times \mathbb{F}_{13}$



References

[1] "The pandoc website." http://pandoc.org/.

[2] G. Bertoni, J. Daemen, M. Peeters, and G. Van Assche, "Keccak," in *Advances in cryptology – eurocrypt 2013*, 2013, pp. 313–314.