# Article Template

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#### Abstract

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## 1 Math Environments

**Definition 1.** This is a definition.

$$x^n + y^n = z^n (2)$$

**Proposition 3.** This is a proposition.

Lemma 4. This is a lemma.

**Theorem 5.** This is a theorem.

```
Algorithm 6: This is an algorithm.
```

```
Input: Some inputs
   Output: Some outputs
   Initialization: Some variables
1 while condition not met do
      Some code;
3
      Some more code;
4 end
5 for i = 0 to k do
      if some condition holds then
         Do some magic;
 7
      else
8
         return m;
9
      end
10
11 end
```

$$1 + 1 = 2 \tag{7}$$

**Example 8.** This is an example.

	col 1	col 2	col 3	col 4
row 1	(1, 1)	(1, 2)	(1, 3)	(1, 4)
row 2	(2,1)	(2, 2)	(2, 3)	(2, 4)
row 3	(3, 1)	(3, 2)	(3, 3)	(3, 4)

Table 9: This is a table.

	A	В	С
Ι	1	2	3
J	4	5	6
Κ	7	8	9

Table 10: This is a Tikz Red Box Table

**Example 11.** This is a second example.

$$E = mc^2 (12)$$

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#### 2 Subfiles

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### 3 Citations

You can cite stuff like [1] and [2]. Combined citations look like this [3, 4].

Use cref for math environments.

- An equation I want to cref Equation 2.
- A definition I want to cref Definition 1.
- A proposition I want to cref Proposition 3.
- A lemma I want to cref Lemma 4.
- A theorem I want to cref Theorem 5.
- An algorithm I want to cref Algorithm 6.
- An example I want to cref Example 8.
- A line of code I want to cref Algorithm 6 Line 3.

Note that autoref does not work properly. There is a autoref warning "No autoref name for 'mycounter'" occurs. The recommended fix would be to rename counters. See http://tex.stackexchange.com/questions/256672/autoref-does-not-seem-to-be-working-properly for details. However, using cref seems to be simpler.

## 4 Images



## Reference

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- [4] Tom Upsilon. "Obscure Greek letters and their meanings in mathematics and the sciences". In: *Proceedings of the seventh international trivia conference*. Ed. by V W Xavier. Philadelphia PA: Last Resort Publishers, 1987, pp. 129–158.
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