# UPPSALA UNIVERSITY

Major heading

MINOR HEADING

# Academic title

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### 1 Section 1

#### 1.1 Text with citations

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### 1.2 tikz

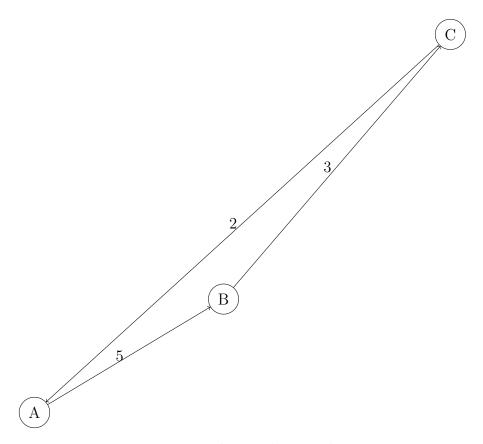


Figure 1: tikz graph example.

# 2 Section 2

### 2.1 Tabular

d	c	e	status
1	2	3	sat
5	11	1	sat
15	8	7	sat
3	19	4	sat
25	18	15	unsat

Figure 2: Tabular example.

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#### 2.2 Pictures

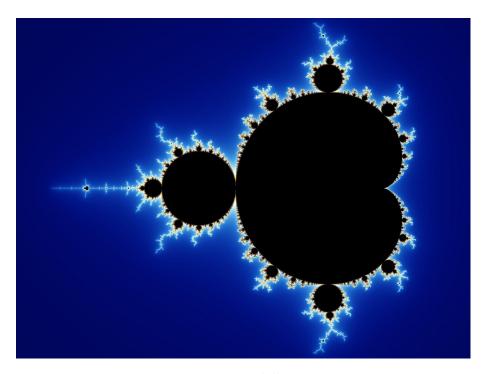


Figure 3: Mandelbrot set

### 3 Section 3

### 3.1 Equations

$$\phi(t) = \frac{1}{\sqrt{2\pi}} \int_0^t e^{-x^2/2} dx \tag{1}$$

$$\prod_{j\geq 0} \left( \sum_{k\geq 0} a_{jk} z^k \right) = \sum_{k\geq 0} z^n \left( \sum_{\substack{k_0, k_1, \dots \geq 0\\k_0 + k_1 + \dots = n}} a_0 k_0 a_{1k_1} \dots \right)$$
(2)

$$\pi(n) = \sum_{m=2}^{n} \left| \left( \sum_{k=1}^{m-1} \lfloor (m/k) / \lceil m/k \rceil \rfloor \right)^{-1} \right|$$
 (3)

$$\{\underbrace{a,\ldots,a,b,\ldots,b}_{\substack{k+1 \text{ elements}}}\}$$
(4)

### 3.2 Algorithm

#### **Algorithm 1** Kruskal(G)

```
1: A \leftarrow \emptyset
2: for all ve
```

2: for all verticies  $v \in G$  do

```
3: Set[] \leftarrow v
```

4: end for

5: Sort Set

6: for all edge  $(u, v) \in G$  do

7: **if**  $find(u) \neq find(v)$  **then** 

8:  $A \cup (u, v)$ 

9: end if

10: end for

11: return A

Complexity is  $\mathcal{O}(|E|\log(|E|))$ 

## References

- [1] Jhon Doe. Amazing book. Awesome publisher, 2022.
- [2] Jhon Doe. "Amazing book". In: Awesome publisher, 2022, pp. 100–200.
- [3] Jhon Doe. example website. http://example.com. Accessed on 31/05/22. 2022.
- [4] Jhon Doe. "Title". In: Journal (2022).