

LATEX WORKSHEET

CCNY AWM

1. SECTION TITLE

1.1. **Subsection Title.** Some plain text. *Some italic text.* **Some bold text.**

- a) The first item.
- b) The second item.
  - The first item.
  - The second item

	col1	col2
row1	cell1	cell2
row2	cell3	cell4

TODO

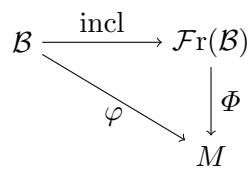


FIGURE 1. The universal property of free modules. (This diagram commutes!)

**Theorem 1.1** (Theorem Name). *Theorem statement.*

*Proof.* A Proof. □

**Definition** (Term). Definition statement.

Here’s an inline math equation:  $f : X \rightarrow Y$ .

$$\begin{aligned} g &: X \rightarrow Y \\ h &: X \rightarrow Y \end{aligned}$$

$$\begin{aligned} (a+b) + (c+d) &= ((a+b) + c) + d \\ &= (a + (b+c)) + d \\ &= a + ((b+c) + d) \\ &= a + (b + (c+d)) \end{aligned}$$

$$\|a+b\| \leq \|a\| + \|b\| \tag{1}$$

$$\begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$

$$f(x) = \begin{cases} 1, & \text{x rational} \\ 0, & \text{x irrational} \end{cases}$$

$$\det(A) = \sum_{\sigma \in S_n} \operatorname{sgn}(\sigma) \left( \prod_{i=1}^n \alpha_{i,\sigma(i)} \right)$$

Here’s an article citation. [1] Here’s a book citation with a specific section.  
[2, §1.1] Here’s a website citation. [3]

#### REFERENCES

- [1] A.Y. Okounkov A.M. Vershik. “A New Approach to the Representation Theory of the Symmetric Groups. II.” In: *J Math Sci* 131 (2005), pp. 5471–5494.
- [2] Emily Riehl. *Category Theory in Context*. Dover Publications, 2016. ISBN: 978-0486809038. URL: <https://math.jhu.edu/~eriehl/context/>.
- [3] Wikipedia. *Tensor product of modules*. URL: [https://en.wikipedia.org/wiki/Tensor\\_product\\_of\\_modules#Modules\\_over\\_commutative\\_rings](https://en.wikipedia.org/wiki/Tensor_product_of_modules#Modules_over_commutative_rings) (visited on 12/22/2021).