Worksheet for Relational Algebra using LaTeX

Note: these are all math symbols so you need to be in the math environment to use them. You can do this two ways:

- `\begin{displaymath} symbols here \end{displaymath}`
  or
- `$ symbols here $.`

symbol name	LaTeXcode	symbol
leftarrow	`\leftarrow`	$\leftarrow$
select	`\sigma`	σ
project	`\Pi`	Π
inner join	`\bowtie`	$\bowtie$
cross product	`\times`	$\times$
rename	`\rho`	ρ
less than	`<`	$<$
greater than	`>`	$>$
less than or equal	`\leq`	$\leq$
greater than or equal	`\geq`	$\geq$
equal	`=`	$=$
not equal	`\neq`	$\neq$
and	`\wedge`	$\wedge$
or	`\vee`	$\vee$
not	`\neg`	$\neg$

Example:

$basic - cust - accts \leftarrow \Pi_{(name, customer.sin, account-number)}(\sigma_{customer.sin = account.sin}(customer \times account))$

And here's the LaTeXcode:

```
$basic-cust-accts \leftarrow \Pi_{(name, customer.sin, account-number)}
  (\sigma_{customer.sin = account.sin}(customer \times account))$
```

Note the use of the `_` symbol for the subscript. Everything you want subscripted must be enclosed in `{}`.

Here's another way you might write this:

$temp1 \leftarrow (customer \times account)$
$temp2 \leftarrow \sigma_{customer.sin = account.sin}(temp1)$
$basic - cust - accts \leftarrow \Pi_{(name, customer.sin, account-number)}(temp2)$

And here's the LaTeXcode:

```
$temp1  \leftarrow (customer \times account) $ \\
$temp2 \leftarrow \sigma_{customer.sin = account.sin}(temp1)$ \\
$basic-cust-accts \leftarrow \Pi_{(name, customer.sin, account-number)}(temp2)$
```