Equations and Math Symbols

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1 First Equations - Inline

This equation is inline b = 5 * 4. This equation is also inline $b = 5^4$.

2 With Floating Environment

 $\alpha \leq \beta \geq \rightarrow$ To add space at the begining and at the end of the document \cup (1)

$$5*4 = 20$$

This is the reference to the equation in the Text. See Equation 1

3 Adding Multiple Arrays

Sometimes you want to add multiple arrays using one environment because they are similar. to do that use the beginequarray environment

$$5 + 5 = 10$$
 (2)

$$7 + 2 + 70 = 867 \tag{3}$$

This is Equation 2 and this is equation 3. To reinforce alignment you can also use the AND sign and LaTex will try its best to realign based on the position of the AND symbol. You can also use 2 AND signs to add more reinforcement.

4 How to include Matrices0 in your Document

This section illustrates how you include matrices to the document. Curved brackets

$$M = \begin{pmatrix} 1 & 3 & 78 \\ 29 & 8 & 10 \\ 78 & 2 & 2 \end{pmatrix}$$

Square brackets

$$M = \begin{bmatrix} 1 & 3 & 78 \\ 29 & 8 & 10 \\ 78 & 2 & 2 \end{bmatrix}$$

5 Working With Algorithms

In this section of the tutorials we look at hoew to form at algorithms using LaTex. See Algorithm 1 below:

```
Algorithm 1 This is our Sample Algorithm
```

```
Output: The Corresponding
Input: Information Table

if a ≥ 5 then

The Value is greater than Five.

else

while a != 5 do

A is not equal to Five

end while
end if
```