To Test The Capabilities of the Human and The Tool

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Contents

Abstract

This is to assess the capabilities of the tool, Microsoft's Word Processor, $MS - WORD$ and the student's comfort level with using it.

1 A Few Aphorisms

We will look at some of the font styles :

This is in *italics*. This is a *slanting* text. This is a **bold face** text. This is a SMALL CAPS text.

This is flushed to the right.

This is a text with flush to the left.

This is centered text.

1.1 Large Font section

This is large text. This is even larger text. This is huge text.

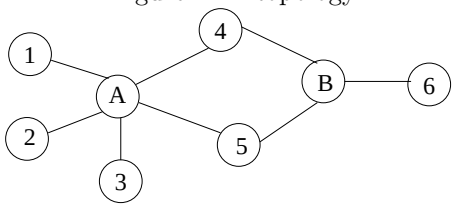
This is even huger than the earlier one.

If you want the text to come in a separate line, separate them by a line too.

2 Including Images

We have a graph which represents a network topology in Fig. 1.

Figure 1: A topology

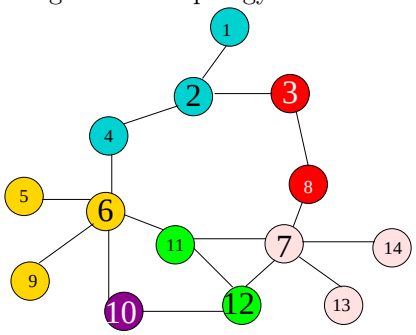


If we take the topology in Fig. 1 from section 2 and color them with different colors, we get the picture in Fig. 2.

3 Mathematical Formulae

All greek symbols are very easy to write - such as α, β, ψ etc. Similarly, all mathematical relational symbols are also quite easy to do: $\neq$, $\leq$, $\geq$, $\simeq$, $\ll$, $\gg$ and so on. Set relationships are also easy: $\in$ to represent membership in a set, $\subset$ to represent subset, Set Minus is $\setminus$ and so on.

Figure 2: A topology



CapMDS = {2, 3, 6, 7, 10, 12}

3.1 Simple Formulae

A superscript x^2 and subscript y_{z1} can be easily done.
A fraction is given as follows: $\frac{x+y}{2^{xy}}$
To get an equation on the next line, you can do the following:

$$\sum_{x}(x^2+1) = \sum_{x-1} x + f(y)$$

3.1.1 Some Symbols

To get an integral, you just say $\int_0^\infty x$.
You can get other special symbols using the package amssymb and amsmath - AMS standing for American Mathematical Society - which has defined these packages.
Thus you say $\mathbb{A}, \mathbb{B}, \mathbb{G}$ or $\mathcal{A}, \mathcal{B}, \mathcal{C}$ for different types of symbols.
Here is how you write the first formula of the Sample Document you set up in Word earlier.
$\delta^\bullet : \mathbb{G}^\times \to \mathbb{G}^\bullet$ is such that $\delta^\bullet(X^\times) = \{x \in \mathbb{G}^\bullet \mid \exists e_{x,y} \in X^\times\}$

3.2 Arrays and other tabular formulae

Let us now create an array: $\begin{array}{cccc} a & b & c & d \\ d & e+f & g^2 & h \end{array}$

We can put the whole of the above in square brackets as follows: $\left[\begin{array}{cccc} a & b & c & d \\ d & e+f & g^2 & h \end{array}\right]$

You can have ellipsis in the text with lower alignment ... or centered alignment as in $\cdots$.
A nice formula:

$$x = \begin{cases} y^2 & \text{if } y > 0 \\ y^{-2} & \text{otherwise} \end{cases}$$

4 Creating Tables

Table 1: An Example Table with multi-column columns separated by different separators

Column 1	**Column 2**	**Column 3**		**Column 4**	
		γ	**Time (s)**	γ	**Time (s)**
1	2	3	4	9	10
5	6	7	8	11	12
a	b	c	d	m	n
e	f	g	h	i	w

We show an example table in Table 1.