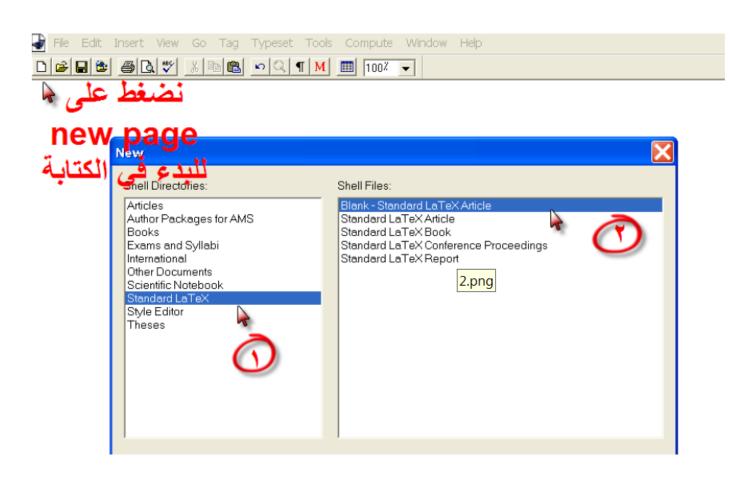


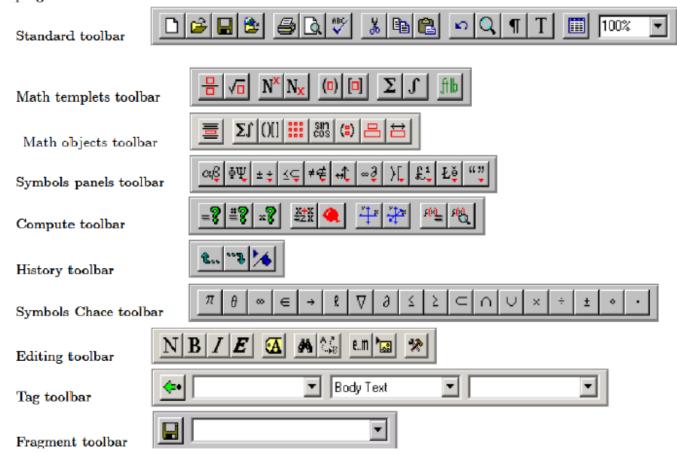
Scientific Workplace 5.5

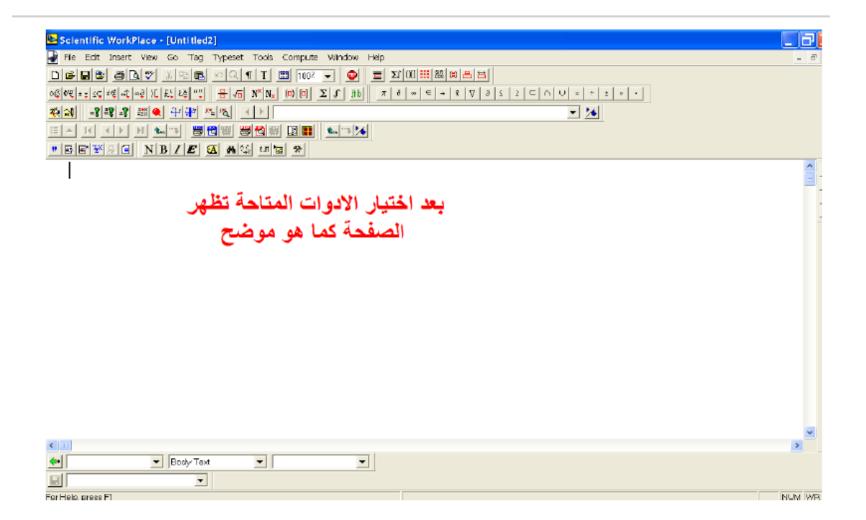
By: Dr. Rola A. Hijazi





The program window contains these toolbars:





0.3.6 Entering and Editing Mathematics

Because the program assumes you're entering text, you must tell it when you want to enter mathematics. Then, you can enter mathematics easily using the toolbar buttons, Insert menu commands, or keyboard shortcuts.

- لتحرير النص اضغط To start mathematics ▶
 - On the Standard toolbar, click T or from the Insert menu, choose Math.

When mathematics is active, the Math/Text toggle appears as

لكتابة رموز باضية اضغط

- ▶ To return to text
 - On the Standard toolbar, click Mor, from the Insert menu, choose Text.

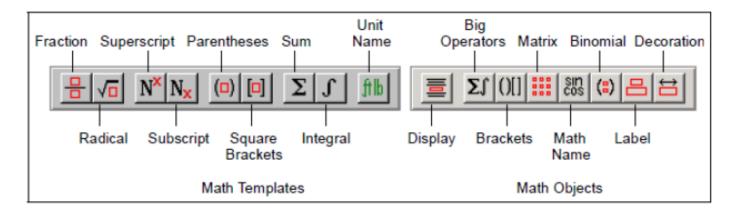
When text is active, the Math/Text toggle appears as

or click ctrl+m -13

Symbol Cache toolbar



Mathematical Objects



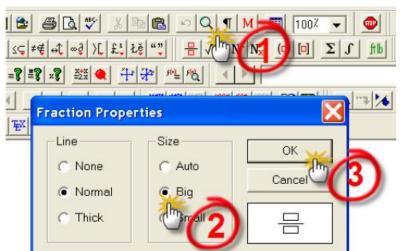
To enter a fraction

l. On 5+++.png h Templates toolbar, click or, from the Insert menu, choose Fraction or press Ctrl+f.

لكتابة الكسر

On the screen, you see $\frac{\Phi}{\Box}$, and the Math/Text toggle changes to

write





To enter a superscript or subscript

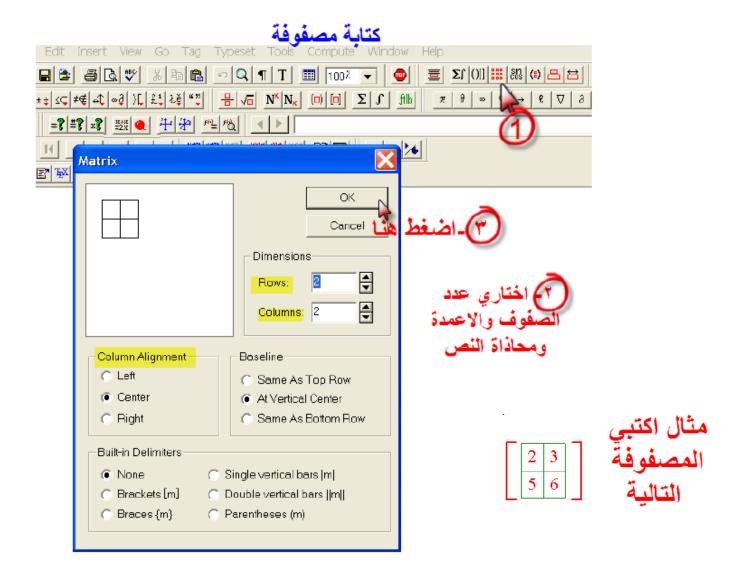
- لكتابة الأس
- 1. Click or, from the Insert menu, choose Math to start mathematics.
- Type a variable.
- enter a superscript.

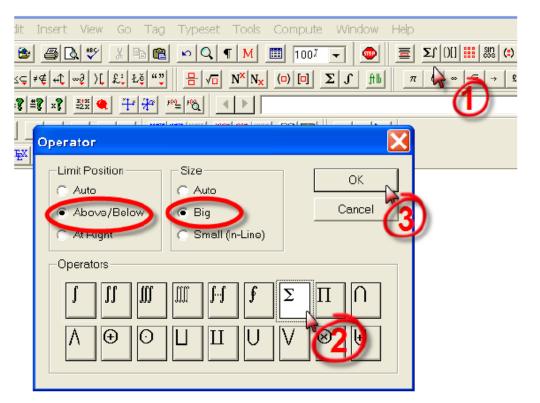
3. On the Math Templates toolbar, click N or press Ctrl+up arrow to Or Ctrl+H

or

On the Math Templates toolbar, click Nx or press Ctrl+down arrow to Ctrl+L enter a subscript.

4. Type the superscript or subscript, and then press the spacebar.





To enter operator

مثال اکتبي ما یلي $\sum_{i=1}^{n} \frac{x^2 + 3}{x - f(x)}$

$$\sum_{i=1}^{n} \frac{x^2 + 3}{x - f(x)}$$



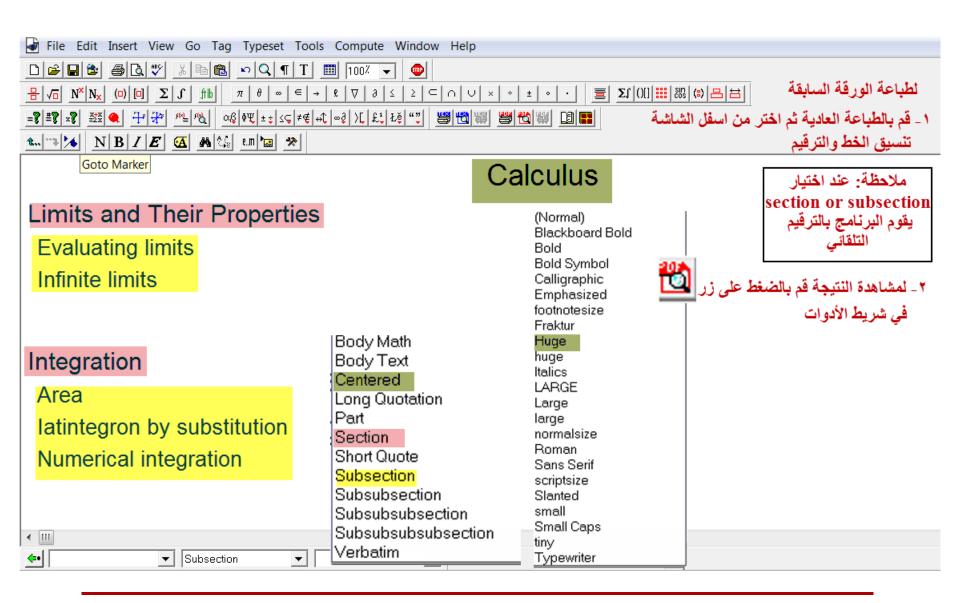
كيفية تنسيق الفصول وأجزائها

Section and subsection

١ ـ قم بطباعة ما يلى باستخدام

Calculus

- 1 Limits and Their Properties
- 1.1 Evaluating limits
- 1.1.1 Properties of limits
- 1.1.2 Finding limits
- 1.2 Infinite limits
- 2 Integration
- 2.1 Area
- 2.2 Intintegron by substitution
- 2.3 Numerical integration



كيفية استخدام الإشارة المرجعية Marker and cross reference

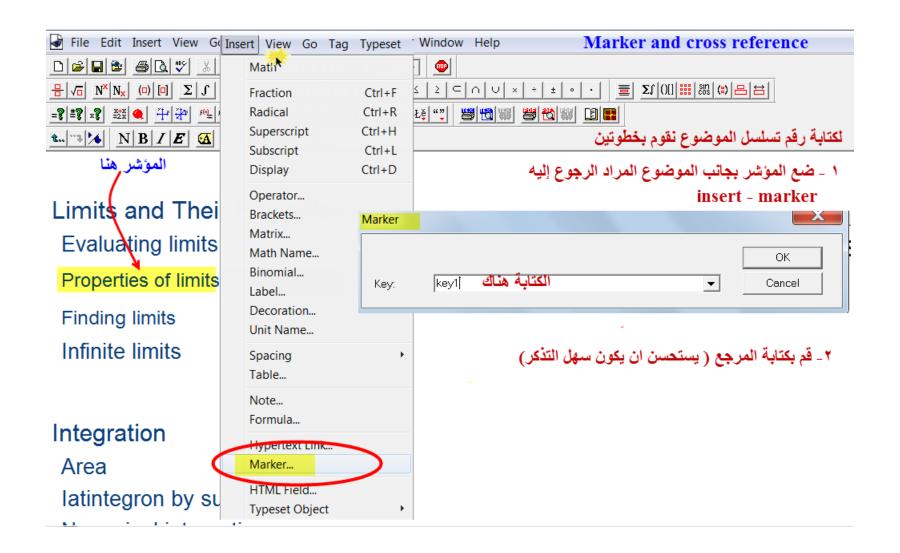
٢ ـ قم بطباعة بطباعة ما يلي

1.1.1 Properties of Limits

Theorem 1 Some basic Limits

Let b and c be real numbers and let n be a positive integers.

- $1. \lim_{x \to c} b = b$
- $2. \lim_{x \to c} x = c$
- $3. \lim_{x \to c} x^n = c^n$



Limits and Their Properties

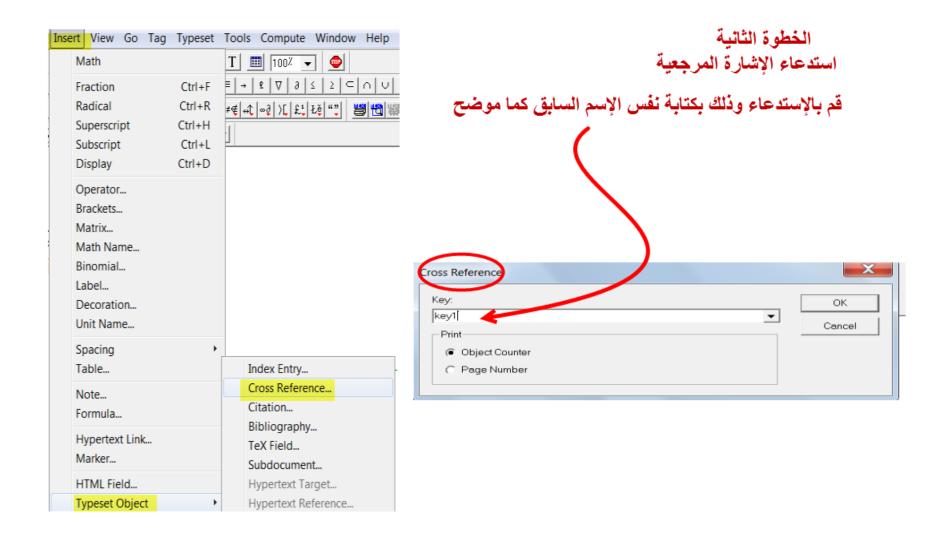
Evaluating limits

لن تظهر في الطباعة

Properties of limits marker: key1

Finding limits

Infinite limits



ref: key1 Properties of Limits

Theorem Some basic Limits

Let b and c be real numbers and let n be a positiv Conclusion Conclusion

- $\lim b = b$

لطباعة الأرقام التسلسلية

(Remove Item Tag) Acknowledgement

Algorithm Axiom:

Bibliography Item

Bullet List Item

Case

Claim

Conclusion

Conjecture

Corollary

Criterion Definition |

Description List Item

Example

Exercise Lemma

Notation |

Numbered List Item

Problem Proof

Proposition

قم بطباعة ما يلي Example 2

Discuss the continuity of the following function

$$h(x) = \begin{cases} x+1, & x \le 0 \\ x^2+1, & x > 0 \end{cases}$$
 (1.1)

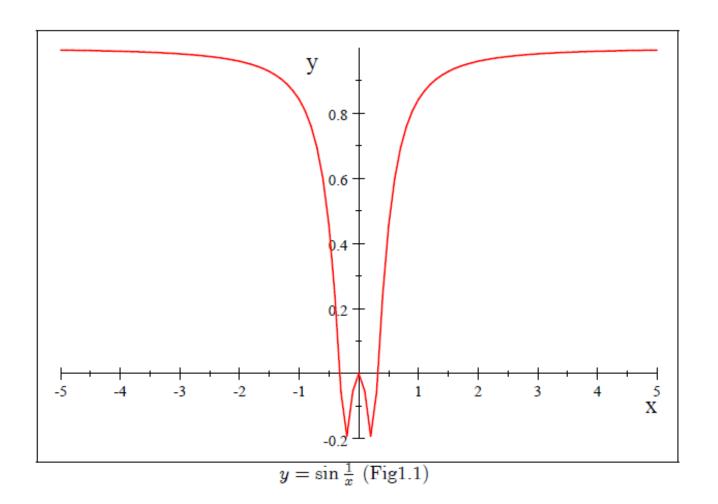
Use (1.1) to find the intervals on which the function is continuous.

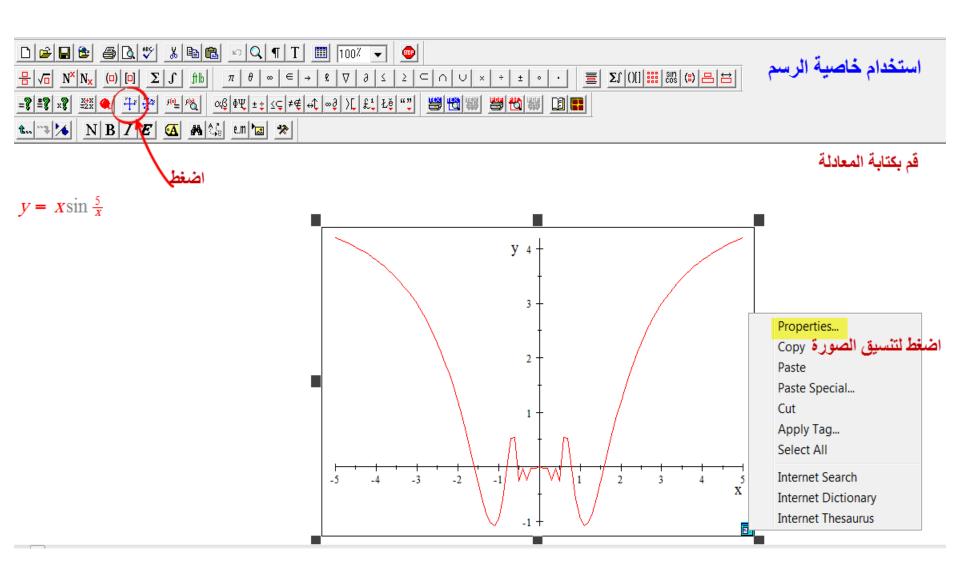
Example 3

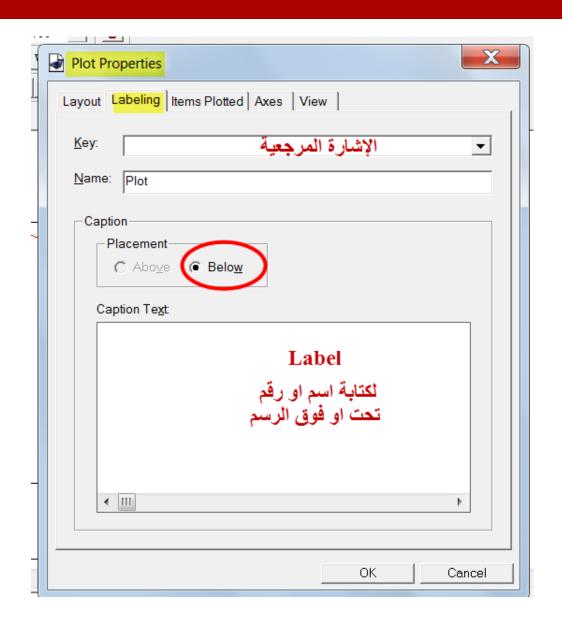
Describe the intervals on which the function is continuous.

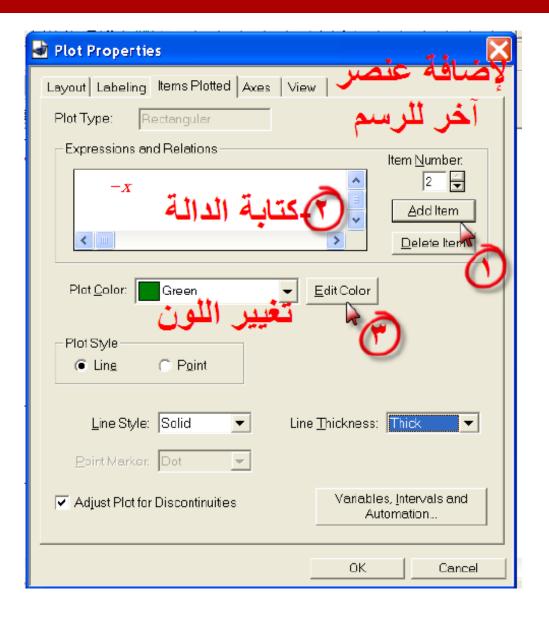
$$f(x) = x \sin \frac{1}{x} \tag{1.2}$$

Use (1.2) to find the intervals on which the function is continuous.











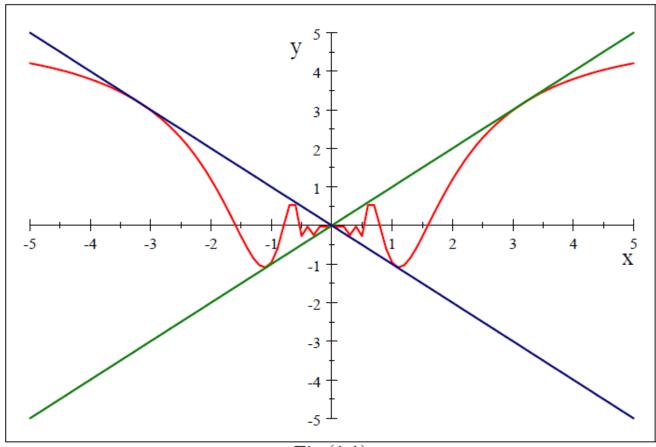


Fig.(1.1)



انتهى بحمد الله الجزء الأول