

# **Maths Remedial Tutor**

# **Math Remedial Tutor**

# Used for FET College - NC (V) Level 2 & Remedial

This quality course engages learner interest with its informative and rich presentation and demonstration of Mathematics making concepts easy to understand.

This course will give the learner a simple explanation that can be viewed and reviewed to increase understanding. Exercise Sheets follow the lesson to give the learner an opportunity to test their knowledge and understanding.

#### For the Lecturer

- Enjoy unique Math activities while exploring with your learners.
- · Excite and motivate bored or fearful learners.
- · Expand your teaching comfort zone.
- · Simplify the educator's task.
- · Exercise sheets included. (Paper)

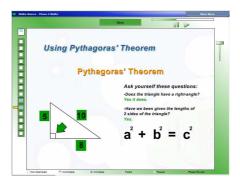
## For the Learner

- · This course will help learners who may be performing two or more years below grade level with Maths.
- Support learners in delivering the content to meet the Maths standards.

# Specific Benefits to e-Learning

- · Let you move at your own pace.
- Provide you with additional review (if necessary).

· Let you know how well you are doing.



## **Topics Covered**

# **Numbers**

- · Order of Operations
- Prime and Composite Numbers
- Powers of 10
- Exercise summary
- Challenge Me!

#### **Decimals**

- Summing (Adding) Decimals
- Ordering Decimals
- EXERCISE SUMMARY
- Challenge Me!

## **Shapes**

- Polygons
- Axial Symmetry
- Types of Triangles
- Solids
- Planes of Symmetry
- EXERCISE SUMMARY
- Challenge Me!

# **Cartesian Plane**

- Plot Points in a Quadrant
- EXERCISE SUMMARY
- Challenge Me!

•

# **Angles**

- Types of Angles
- Rotation
- Rotational Transformations
- Bisecting Lines
- EXERCISE SUMMARY
- Challenge Me!

# <u>Algebra</u>

- Variables
- Exponents Explained
- Terms
- Expressions
- Challenge Me!
- Brackets
- Algebraic Fractions
- Linear Equations
- Exercise Summary
- Multiplying Variables

#### **Finance**

- Simple Interest
- Challenge Me!
- Examples
- Exercise Summary
- Compound Interest

# **Data Handling**

- Introduction
- Organising Data
- The Median
- The Mean
- Exercise Summary
- The Range and Mode
- Challenge Me!

#### Ratio, Rate & Proportion

- Ratio
- Rate
- Challenge Me!
- EXERCISE SUMMARY
- Proportion

#### **Pythagoras**

- Pythagoras
- Examples of Pythagoras' Theorem
- Pythagoras' Theorem When To Use It
- Pythagoras' Theorem Part 1
- Pythagoras' Theorem Part 2
- Pythagoras' Theorem Part 3
- EXERCISE SUMMARY
- Using Pythagoras' Theorem
- Challenge Me!

#### **More Polygons**

- More Polygons
- Challenge Me!Congruent Polygons
- EXERCISE SUMMARY
- Similar Polygons

# **Areas & Perimeters**

- Areas & Perimeters
- What is Pi?
- Challenge Me!
- Exercise Summary

#### **Volume & Surface Area**

- Introduction
- EXERCISE SUMMARY
- Formulas
- Challenge Me!

# **More Cartesian Plane**

- Equation of a Line
- Intersection of 2 Lines
- EXERCISE SUMMARY
- Challenge Me!

#### More Algebra

- Factors Extracting Common Factors
- Factorise Quadratics
- Simultaneous Equations
- Factors Grouping Similar Terms
- Exercise Summary
- · Challenge Me!

# **Powerful Reporting**

The LMS provides a comprehensive set of powerful real-time reports so that you can measure your investment and view learner usage.

- Course Usage Report: This report allows you to extract basic usage data on courses that have been accessed in the system.
- User Usage Report: This report shows a single user's tracking data inside a course.
- Certificates: Certificates of completion can be printed and customized from within the LMS.Learner
  Collaboration

A built in Forum allows learners, instructors, facilitators and educators to collaborate and discuss various issues.

- The Forum is real-time which allows users to communicate instantly.
- All topics are logged in the database for later review.
- · Administrators can delete unwanted threads.

# **LMS Features**

#### **Flexible**

The LMS is a flexible system that allows you to:

- Fully customise the look and feel of the user interface to suit your organisation's branding.
- Multilingual (English, French and Arabic currently available). Other languages are easily added.

#### **Fast**

- LMS is easy to install: Server installation is a breeze and can be performed by almost any level of user.
- LMS is small in terms of disk space and bandwidth requirements minimising the impact on the network.
- LMS does not require a high end server to perform its tasks.

# **System Requirements**

# **Minimum System Requirements:**

# **Server Hardware: (Multi user - Intranet environment)**

- 1) 1 GHz Intel or AMD equivalent for +-20 active user connections. Consider a more powerful server for more user connections.
- 2) 512Mb RAM.
- 3) 100 Mbps TCP/IP network connection (Ethernet) or +256Kbps per client connection.
- 4) 150Mb + 70Mb per course free Hard Disk space.

#### **Server Software: (Multi user - Intranet environnent)**

- 1) Windows 2000 server, XP professional, 2003 Server.
- 2) Open TCP/IP port 2501 and 8080
- 3) Internet Explorer 6 or later.

#### **Client Hardware:**

- 1) 500 MHz Intel Pentium 3 or AMD equivalent.
- 2) 256Mb RAM.
- 3) TCP/IP network connection +256Kbps minimum.
- 4) 100Mb Free Hard Disk space (Temporary Internet Files).

#### **Client Software:**

- 1) Windows 2000 professional, 2000 server, XP Home, XP Professional, 2003 server
- 2) Internet Explorer 6 or later
- 3) Macromedia Flash Player 8 or later (included on CD)
- 4) Windows Media Player 7 or later (included on CD) Windows XP has version 8 pre-installed.

#### **Considerations**

#### Firewall:

InfoServer uses Windows Sockets for client - server communication.

The server needs an open port (default 2501) to accept (listen) for client connections.

The client needs to be able to open a port (default 2501) to the server. Please configure firewalls appropriately.

#### Installation:

You need to logon as an administrator to run the installation file.

#### **Macromedia Flash Player 8:**

A player auto detection script runs when accessing the content. After installing or updating the Flash Player it is important to CLOSE all open Internet Explorer windows.

#### **Windows Media Player 7:**

A player auto detection script runs when accessing the content. After installing or updating the Window Media Player it is important to RESTART the computer.

#### **SCORM 1.2**

The LMS supports SCORM version 1.2.

API conforms to RTE level 3. All Mandatory and optional data elements supported.

#### Contact NetLearn Update cc

#### Jenny Cole,

Tel : 031 581 1300 Cell : 082 492 8984

Email: jennycole@netlearn.co.za